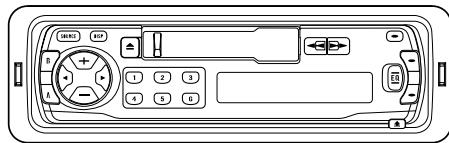


Pioneer

Service Manual

KEH-P1010R/XM/EW



ORDER NO
CRT2607

MULTI-CD CONTROL HIGH POWER CASSETTE PLAYER WITH RDS TUNER

KEH-P1010R XM/EW
KEH-P1013R XM/EW

CONTENTS

1. SAFETY INFORMATION.....	2	7. GENERAL INFORMATION.....	26
2. EXPLODED VIEWS AND PARTS LIST	2	7.1 DIAGNOSIS	26
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM...	8	7.1.1 DISASSEMBLY	26
4. PCB CONNECTION DIAGRAM.....	14	7.1.2 CONNECTOR FUNCTION DESCRIPTION....	27
5. ELECTRICAL PARTS LIST.....	21	7.2 PARTS	28
6. ADJUSTMENT.....	25	7.2.1 IC.....	28
		7.2.2 DISPLAY.....	32
		7.3 OPERATIONAL FLOW CHART.....	33
		8. OPERATIONS AND SPECIFICATIONS	34

PIONEER CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan

PIONEER ELECTRONICS SERVICE INC. P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.

PIONEER EUROPE NV Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium

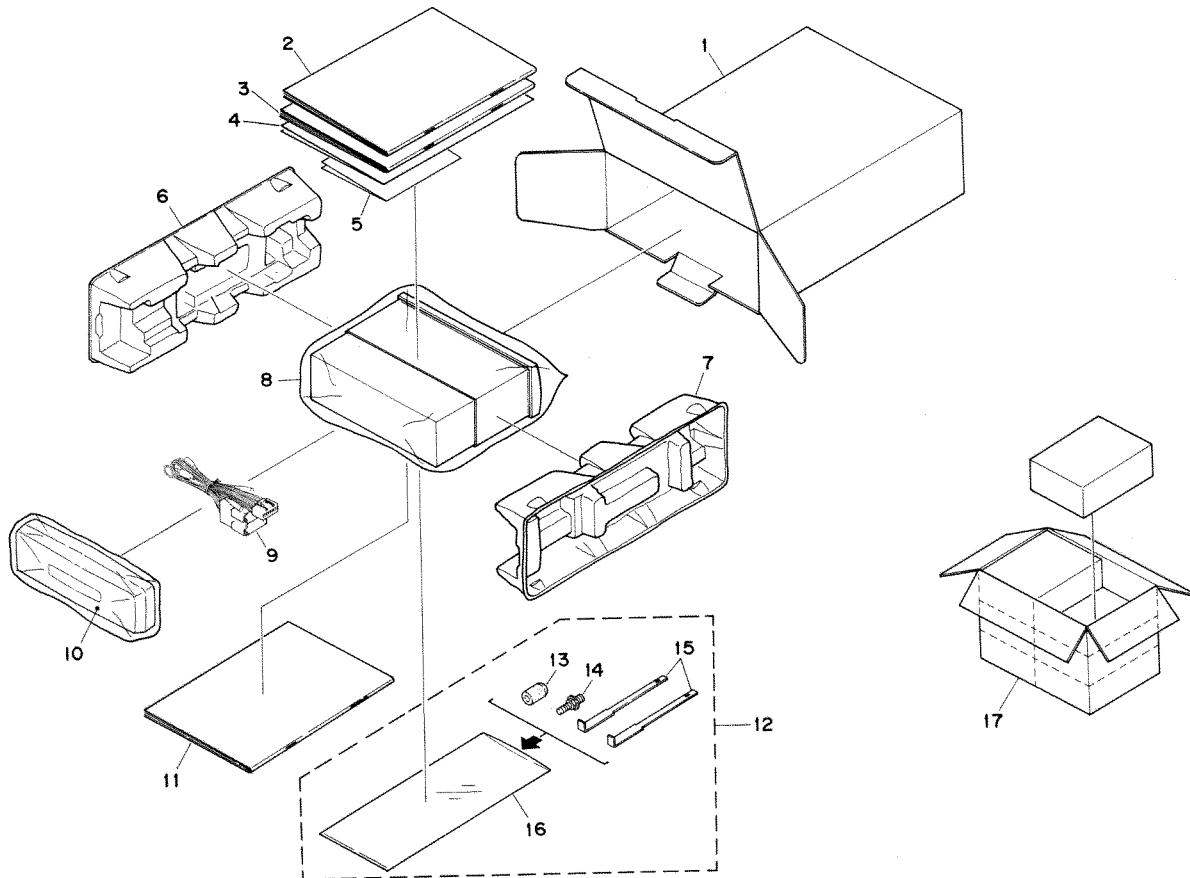
PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 253 Alexandra Road, #04-01, Singapore 159936

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely; you should not risk trying to do so and refer the repair to a qualified service technician.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING



NOTE

- Parts marked by “*” are generally unavailable because they are not in our Master Spare Parts List.

● PACKING SECTION PARTS LIST

KEH-P1010R/XM/EW

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Carton	CZH5577		11	Owner's Manual	CZR2942
	2	Owner's Manual	CZR2940	*	12	Accessory Assy	CEA2397
	3	Installation Manual	CZR2941		13	Bush	CNV3930
*	4	Warranty Card	CRY1157		14	Screw	CBA1002
*	5	Passport	CRY1013		15	Handle	CNC5395
	6	Protector	CHP1623		16	Polyethylene Bag	E36-615
	7	Protector	CHP1622		17	Contain Box	CZH5578
	8	Polyethylene Bag	CZE2903				
	9	Cord Assy	CZD2977				
	10	Case Assy	CXB3520				

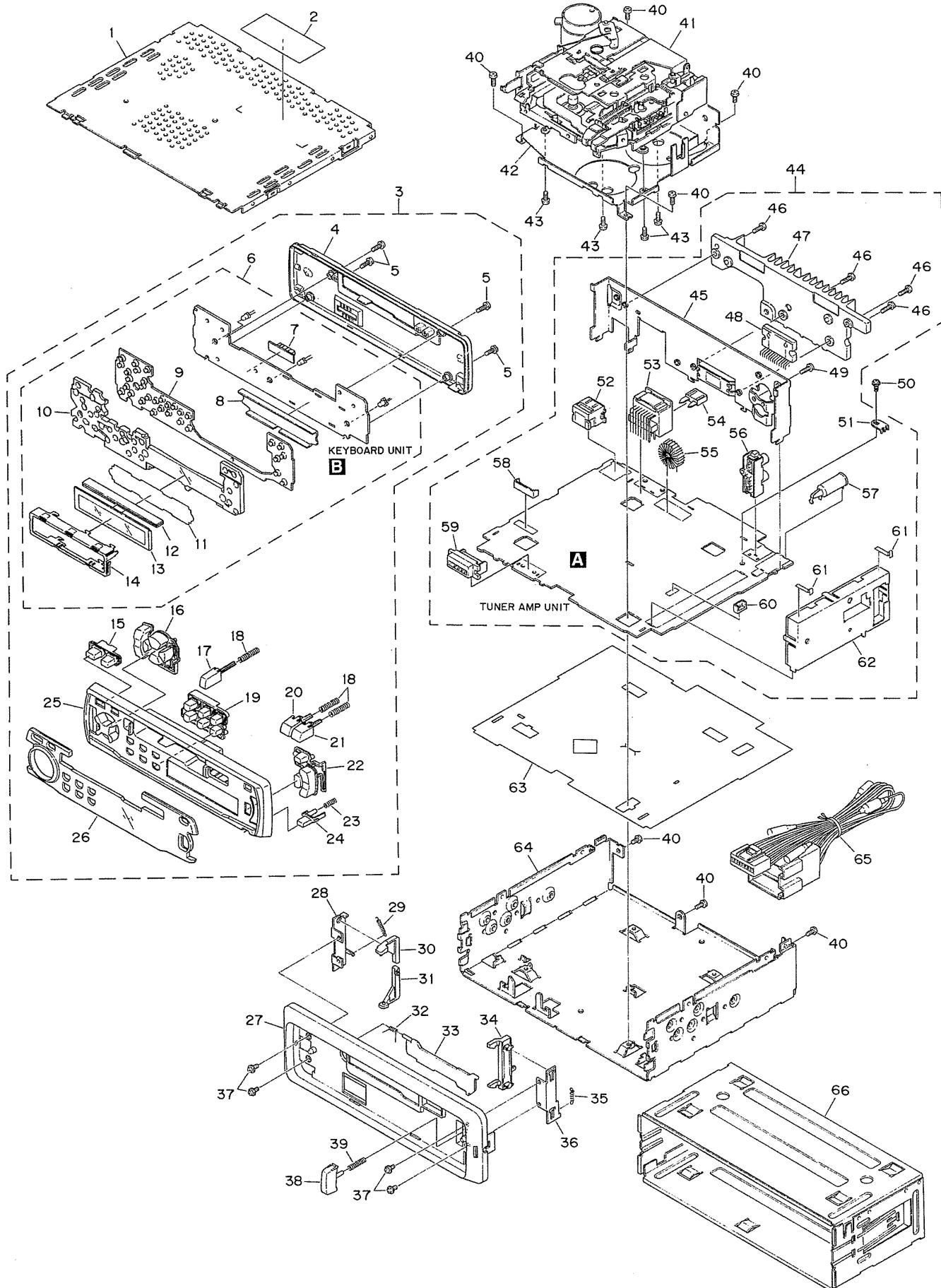
KEH-P1013R/XM/EW

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Carton	CZH5579		11	Owner's Manual	CZR2942
	2	Owner's Manual	CZR2940	*	12	Accessory Assy	CEA2397
	3	Installation Manual	CZR2941		13	Bush	CNV3930
*	4	Warranty Card	CRY1157		14	Screw	CBA1002
*	5	Passport	CRY1013		15	Handle	CNC5395
	6	Protector	CHP1623		16	Polyethylene Bag	E36-615
	7	Protector	CHP1622		17	Contain Box	CZH5580
	8	Polyethylene Bag	CZE2903				
	9	Cord Assy	CZD2977				
	10	Case Assy	CXB3520				

Owner's Manual, Installation Manual

Part No.	Language
CZR2940	English, Spanish, German
CZR2941	English, Spanish, German, French, Italian, Dutch
CZR2942	French, Italian, Dutch

2.2 EXTERIOR



(1)EXTERIOR SECTION PARTS LIST

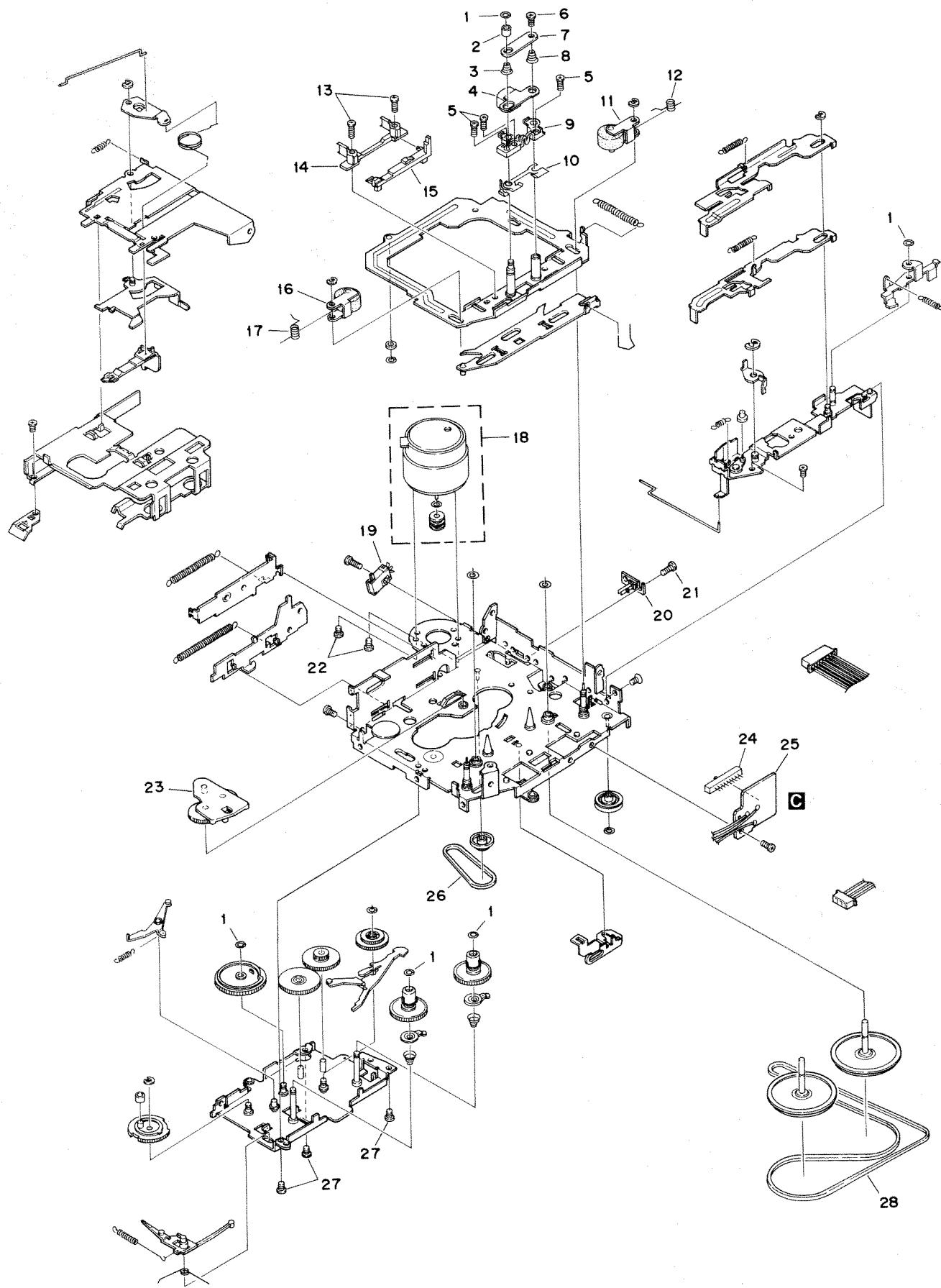
Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
*	1	Case	CZN6739		36	Bracket	CNC6791
	2	Label	CZA5543		37	Screw	IMS20P030FZK
	3	Grille Unit	See Contrast table(2)		38	Button	CAC4836
	4	Cover	See Contrast table(2)		39	Spring	CBH1996
	5	Screw	BPZ20P100FZK		40	Screw	BSZ26P060FMC
	6	Keyboard Unit	See Contrast table(2)		41	Mechanism	CZX5514
	7	Connector(CN900)	CKS3580		42	Bracket	CZN6738
	8	Holder	CZN6759		43	Screw	BMZ26P040FMC
	9	Rubber	CZN6744		44	Tuner Amp Unit	CZW5519
	10	Lighting Conductor	CZN6758		45	Panel	CZN6741
	11	Sheet	CZN6760		46	Screw	BSZ26P100FMC
	12	Connector	CZN6745		47	Heat Sink	CZN6740
	13	LCD(LCD900)	CZA5541		48	IC(IC500)	TA8277H
	14	Holder	CZN6743		49	Screw	BPZ26P100FZK
	15	Button (SOURCE)	CZA5535		50	Screw	ISS26P055FUC
	16	Button (CROSS)	CZA5532		51	Terminal(G1)	CKF1059
	17	Button (EJECT)	CZA5531		52	Connector(CN600)	CKS3408
	18	Spring	CZB2976		53	Connector(CN200)	CZK2943
	19	Button (1-6)	CZA5533		54	Fuse(10A)	CEK1208
	20	Button (REW)	CZA5530		55	Choke Coil (L700)	CTH1221
	21	Button (FF)	CZA5529		56	Pin Jack(CN700)	CKB1041
	22	Button (EQ)	CZA5534		57	Antenna Jack(CN100)	CKX1056
	23	Spring	CZB2977		58	Plag (CN300)	CZK2946
	24	Button	CAC5789		59	Connector(CN800)	CKS3581
	25	Grille	See Contrast table(2)		60	Plug (CN350)	CZK2945
	26	Plate Assy	See Contrast table(2)		61	Plate	CZN6730
	27	Panel	See Contrast table(2)		62	FM/AM Tuner Unit	CHX1442
	28	Bracket	CNC6135		63	Insulator	CZN6742
	29	Spring	CBH1834		64	Chassis	See Contrast table(2)
	30	Arm	CNV4692		65	Cord Assy	CZD2977
	31	Arm	CNV4693		66	Holder Unit	CXB6681
	32	Spring	CBH2126				
	33	Door	See Contrast table(2)				
	34	Arm	CNV4728				
	35	Spring	CBH1835				

(2)CONTRAST TABLE

KEH-P1010R/XM/EW and KEH-P1013R/XM/EW have the same construction except for the following:

Mark No.	Symbol and Description	Part No.	
		KEH-P1010R/XM/EW	KEH-P1013R/XM/EW
3	Grille Unit	CZX5512	CZX5513
4	Cover	CZN6753	CZN6754
6	Keyboard Unit	CZW5522	CZW5521
25	Grille	CZN6746	CZN6747
26	Plate Assy	CZX5507	CZX5508
27	Panel	CZN6756	CZN6757
33	Door	CAT2109	CAT2108
64	Chassis	CZN6736	CZN6737

2.3 CASSETTE MECHANISM



NOTE

- For the cassette mechanism, only the parts listed here are available as spare parts.
The others (not shown in the list) cannot be supplied.

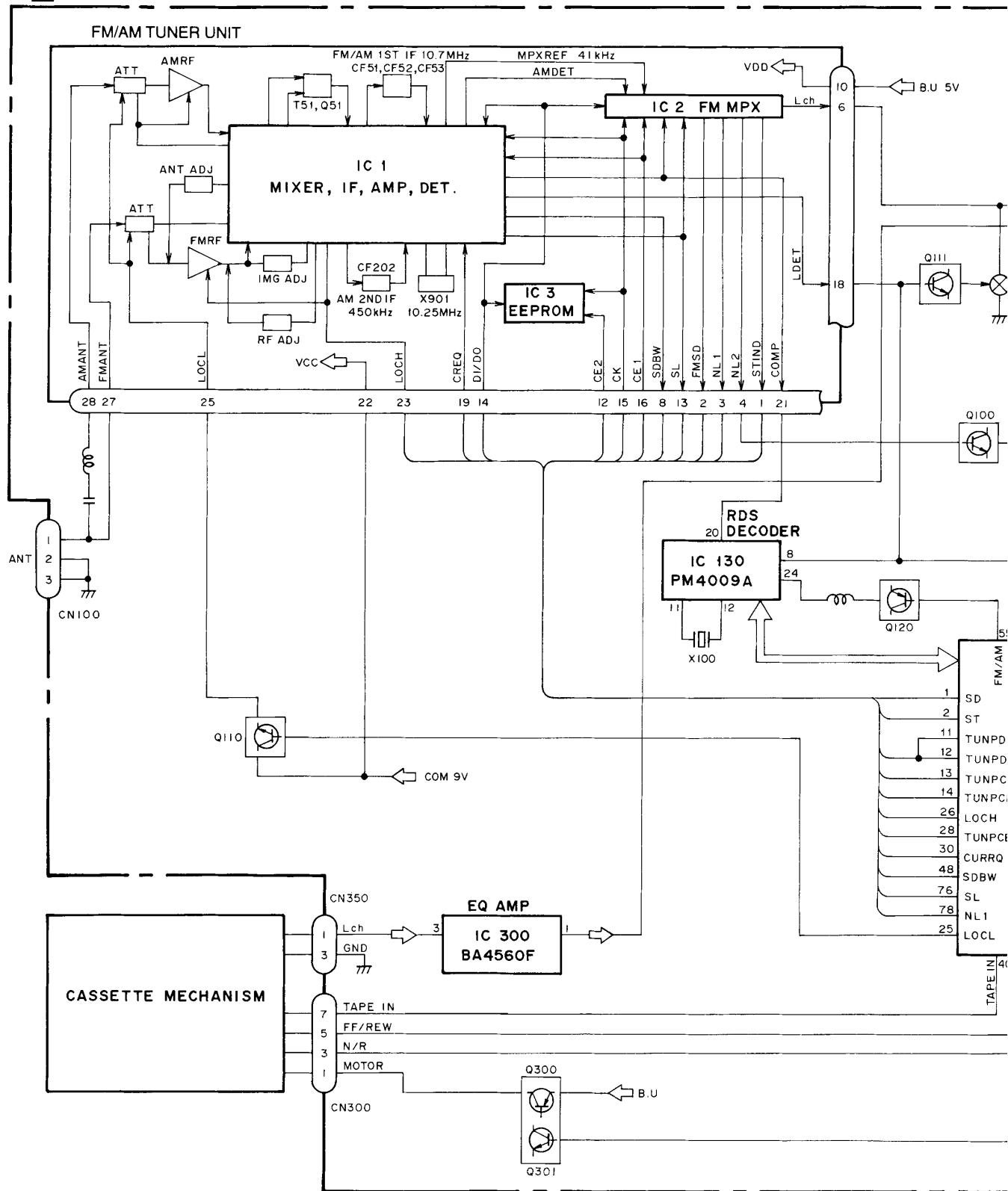
● CASSETTE MECHANISM SECTION PARTS LIST

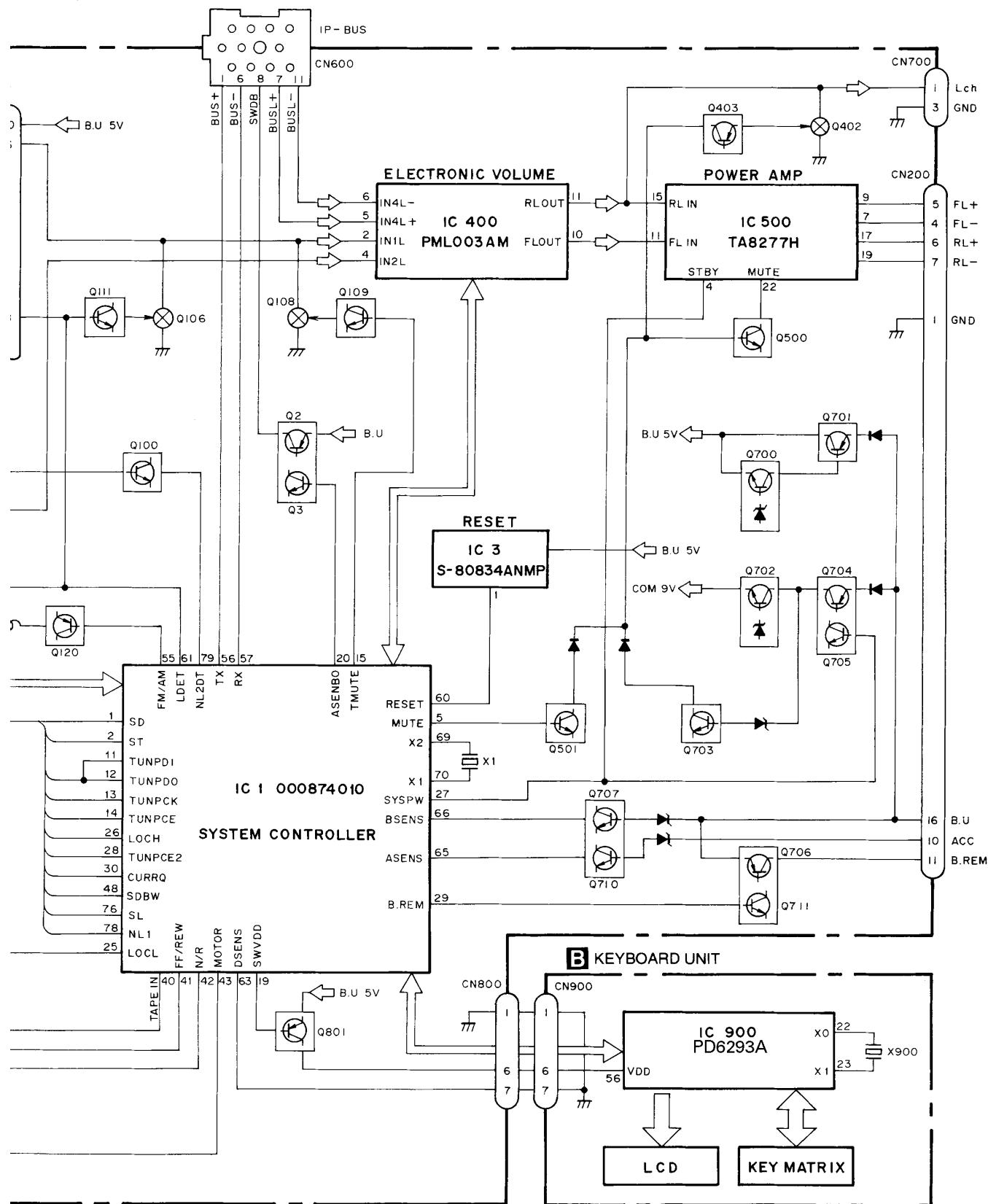
Mark	No.	Description	Part No.
1	Washer		1-0036-5024
2	Roller		1-0363-3018
3	Spring		1-0036-4011
4	Head		1-0036-7123
5	Screw		1-0138-5002
6	Screw		2-1012-0040-C2
7	Plate		1-0036-1015
8	Spring		1-0036-4010
9	Arm		10138-2005-3
10	Shim		1-0138-1006
11	Pinch Arm (F) Assy		1-0036-6014
12	Spring		1-0363-4003
13	Screw		2-1032-0070-C2
14	Tape Guide		1-0038-2018
15	Link		1-0363-2006
16	Pinch Arm (R) Assy		1-0036-6013
17	Spring		1-0363-4004
18	Motor Assy (M1)		X-0363-7006
19	Power Switch (S1)		1-0363-7005
20	Mute Switch (S2)		1-0363-7001
21	Screw		213317040-C2
22	Screw		2-1032-0025-C2
23	Arm Assy		X-0363-6003
24	Slide Switch (S3)		1-0363-7002
25	SW PWB		1-0363-7008
26	Belt		1-0036-5018
27	Screw		213820030-C2
28	Belt		1-0036-5004

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

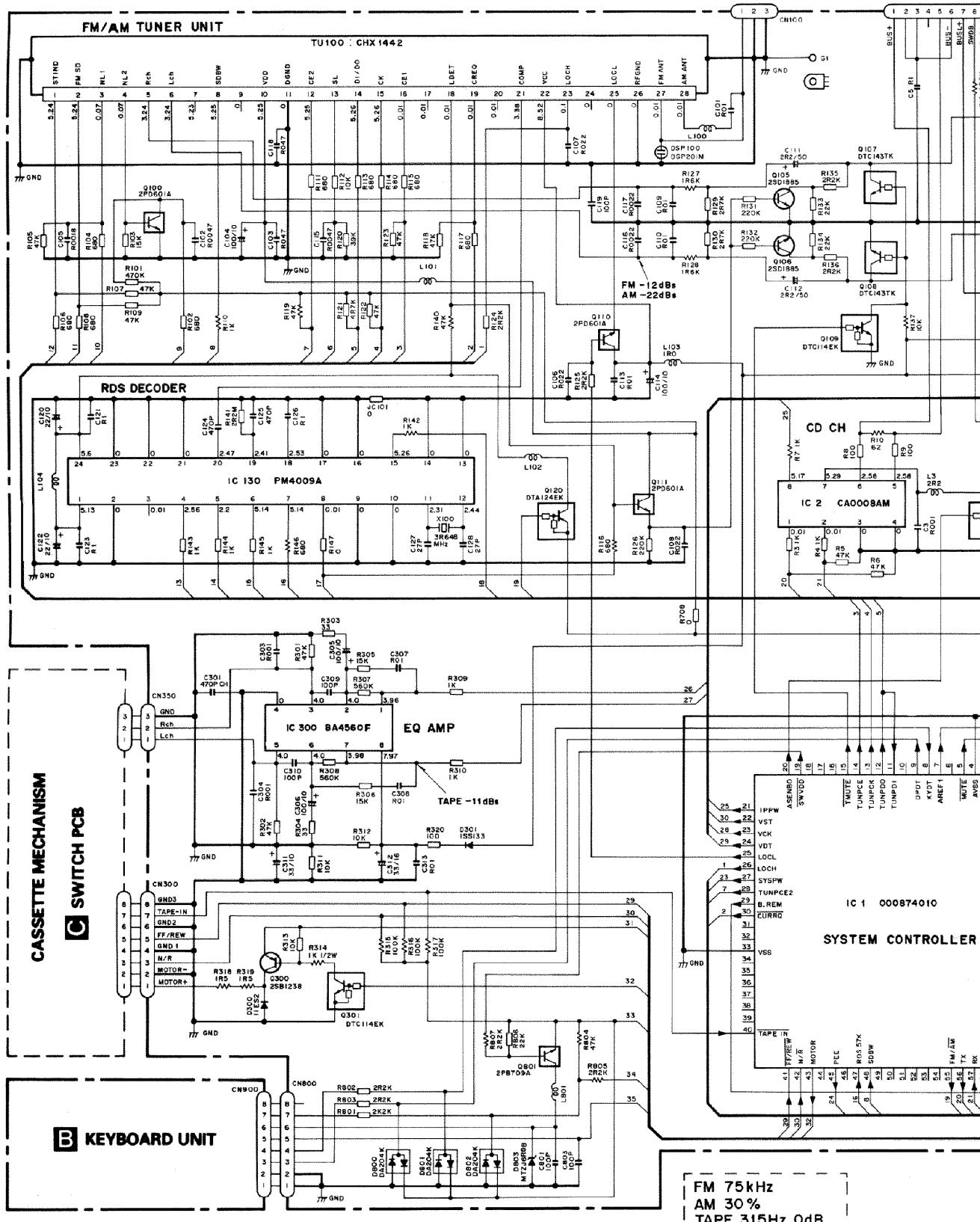
A TUNER AMP UNIT





KEH-P1010R,P1013R

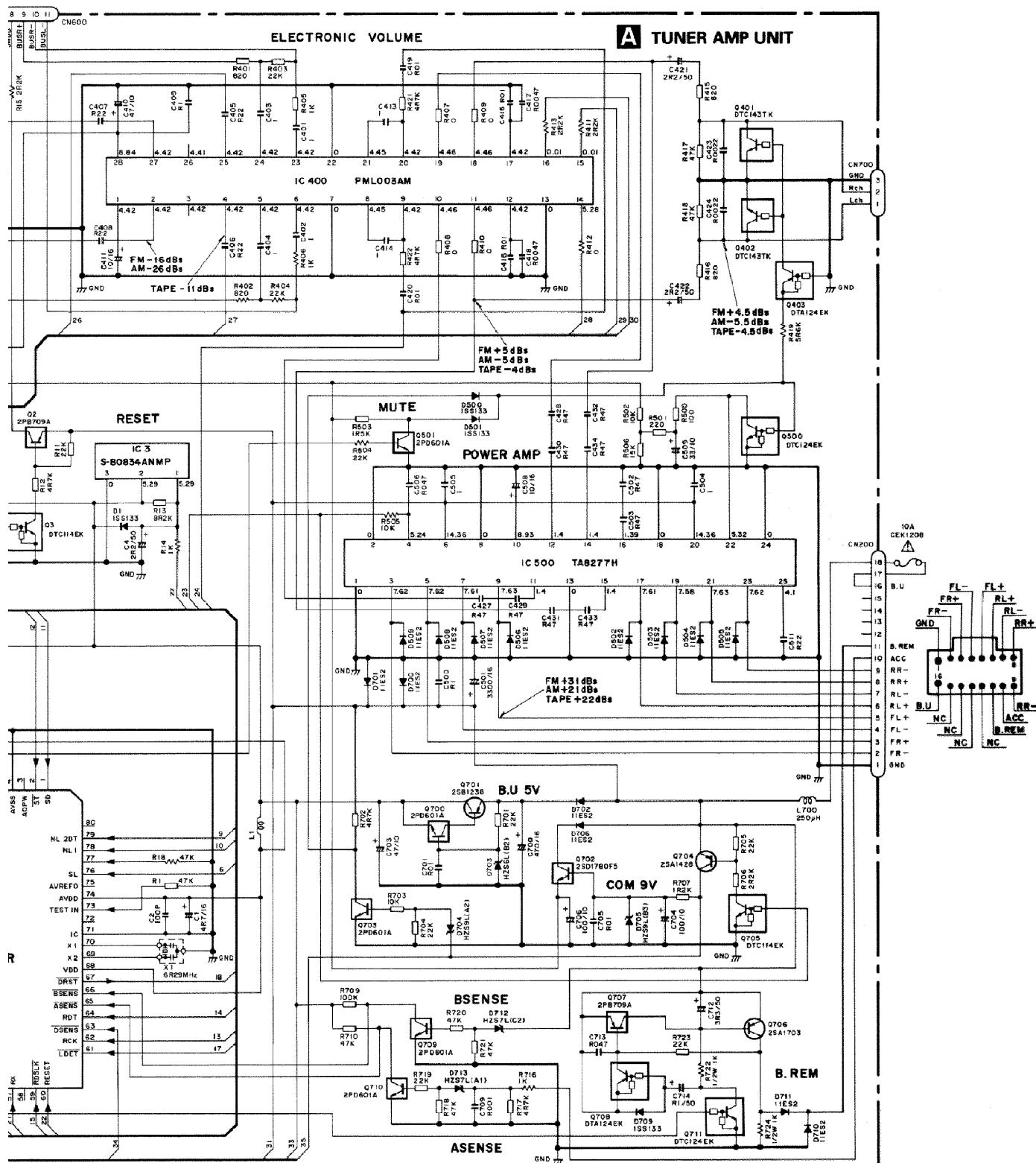
3.2 OVERALL CONNECTION DIAGRAM



B KEYBOARD UNIT

FM 75kHz
AM 30 %
TAPE 315Hz 0dB

10 A

**NOTE:**

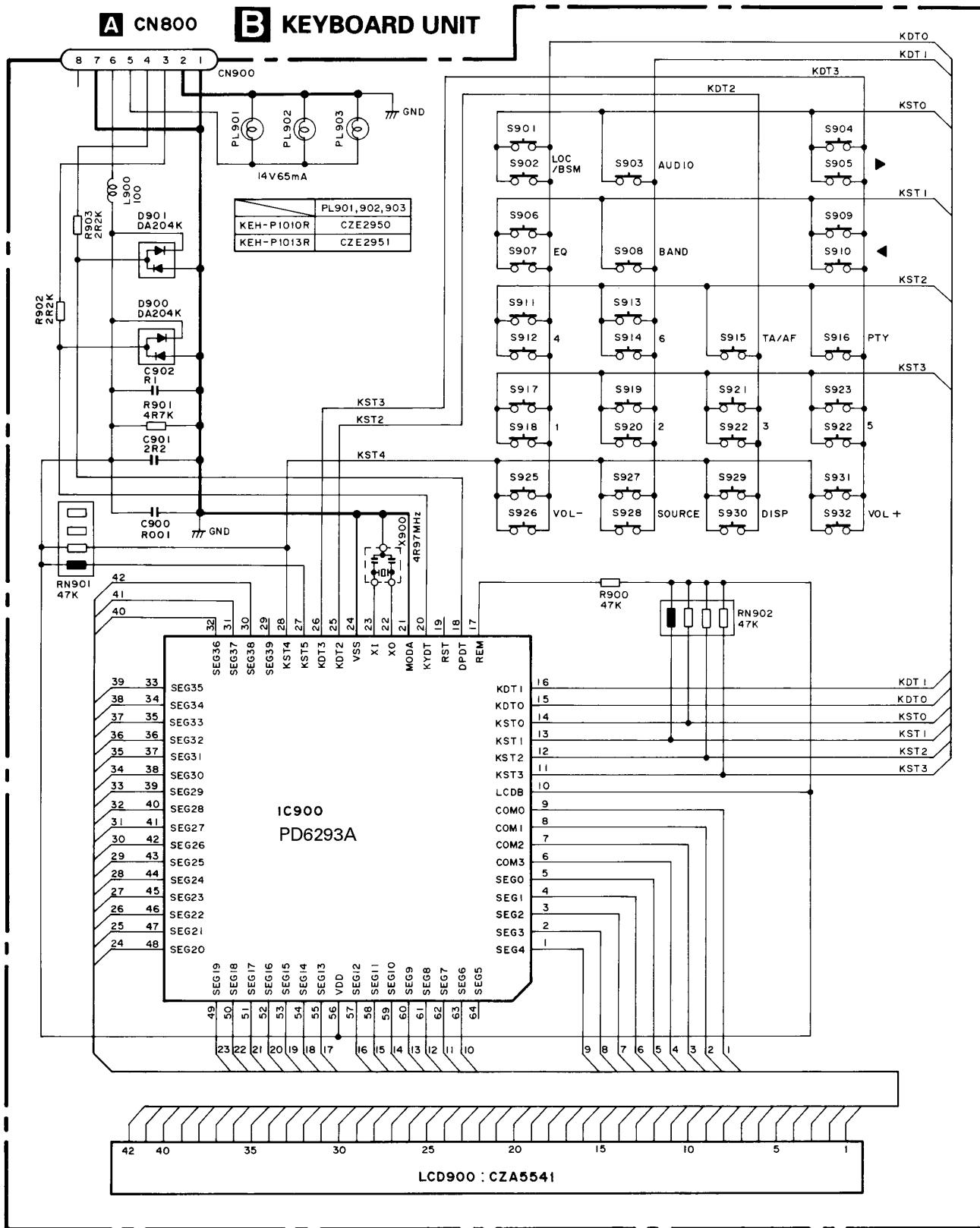
- Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as:
 $2.2 \rightarrow 2R2$
 $0.022 \rightarrow R022$

The \triangle mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.

3.3 KEYBOARD UNIT

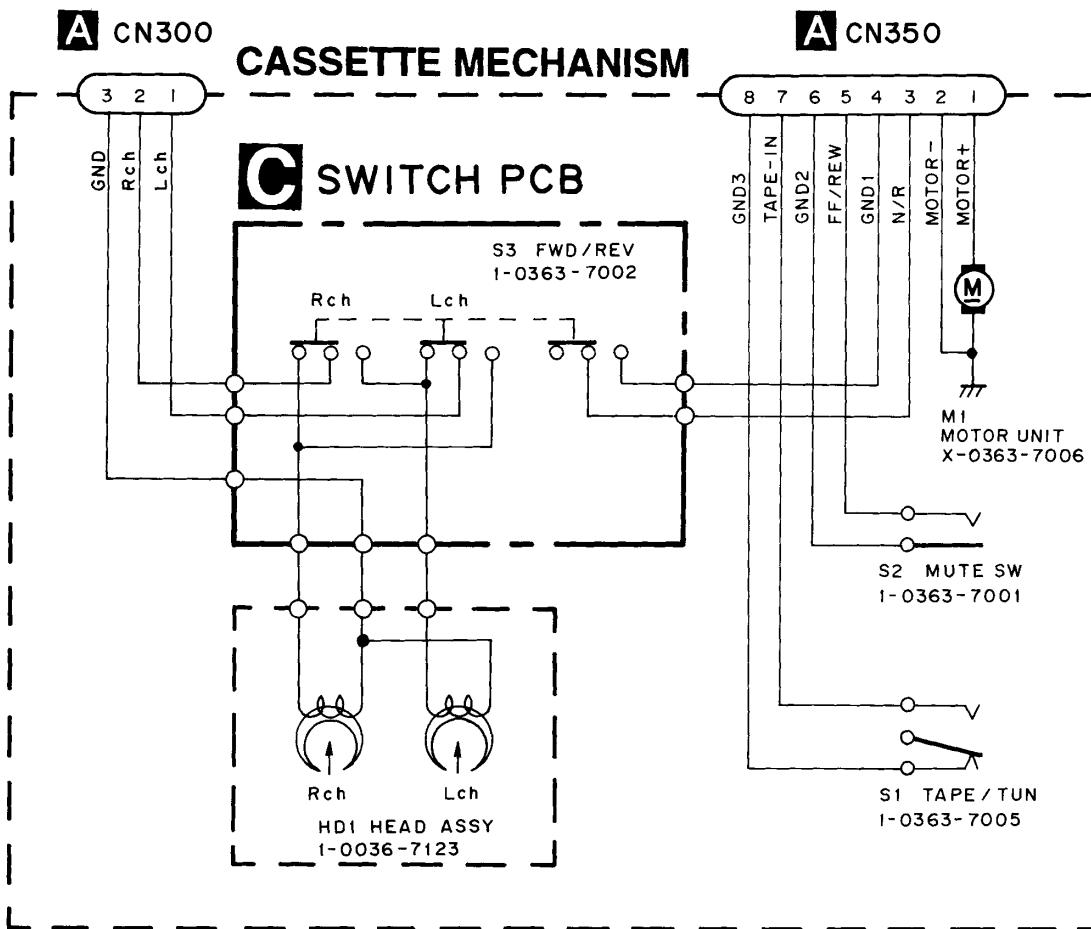
A

A CN800**B** KEYBOARD UNIT

12

B

3.4 CASSETTE MECHANISM



SWITCHES :

- S1 : TAPE/TUN SWITCH TAPE/TUN
- S2 : MUTE SWITCH ON-OFF
- S3 : FWD/REV SWITCH FWD-REV

The underlined indicates the switch position.

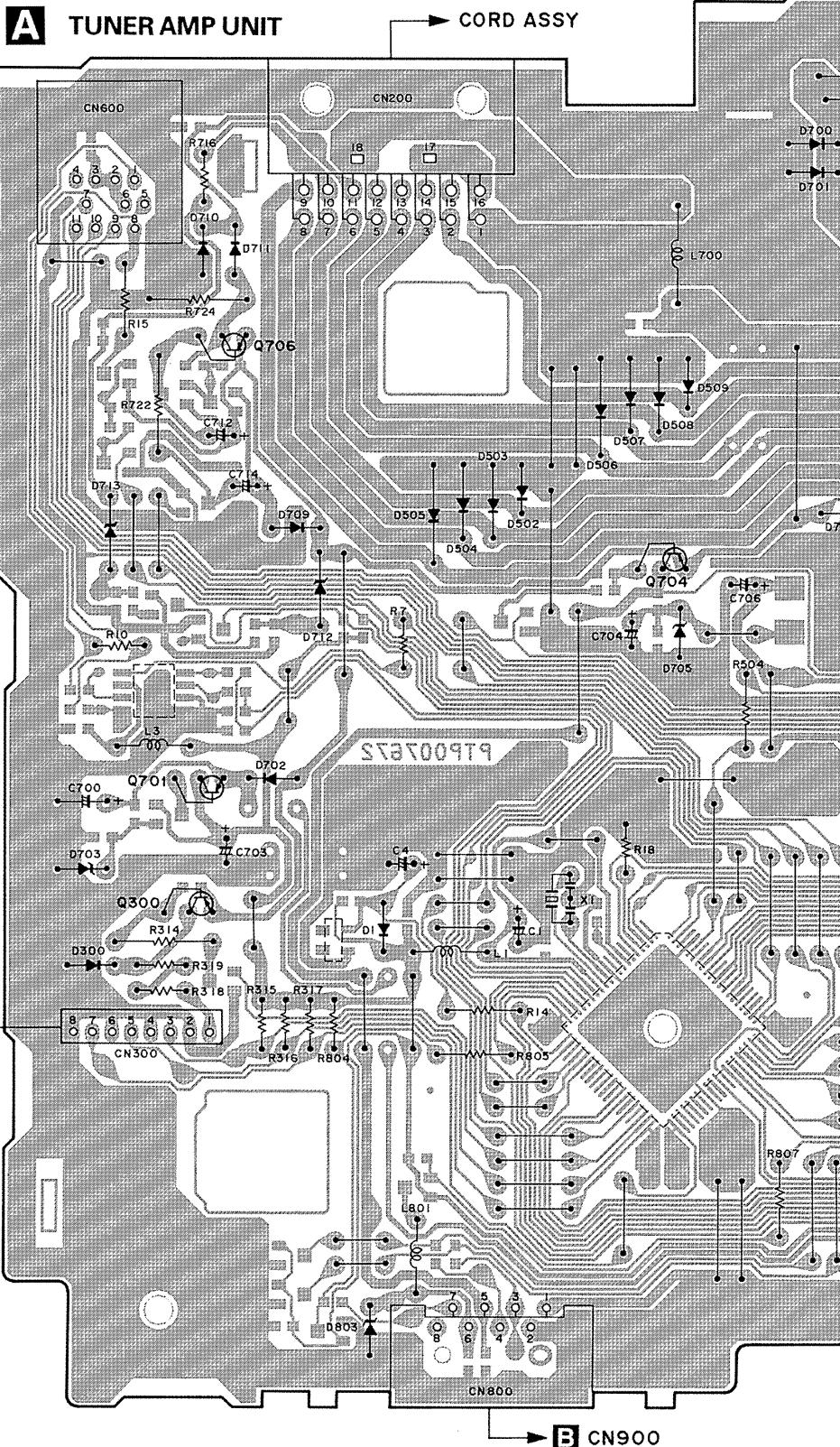
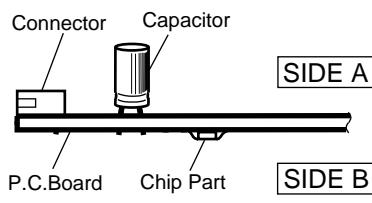
4. PCB CONNECTION DIAGRAM

4.1 TUNER AMP UNIT

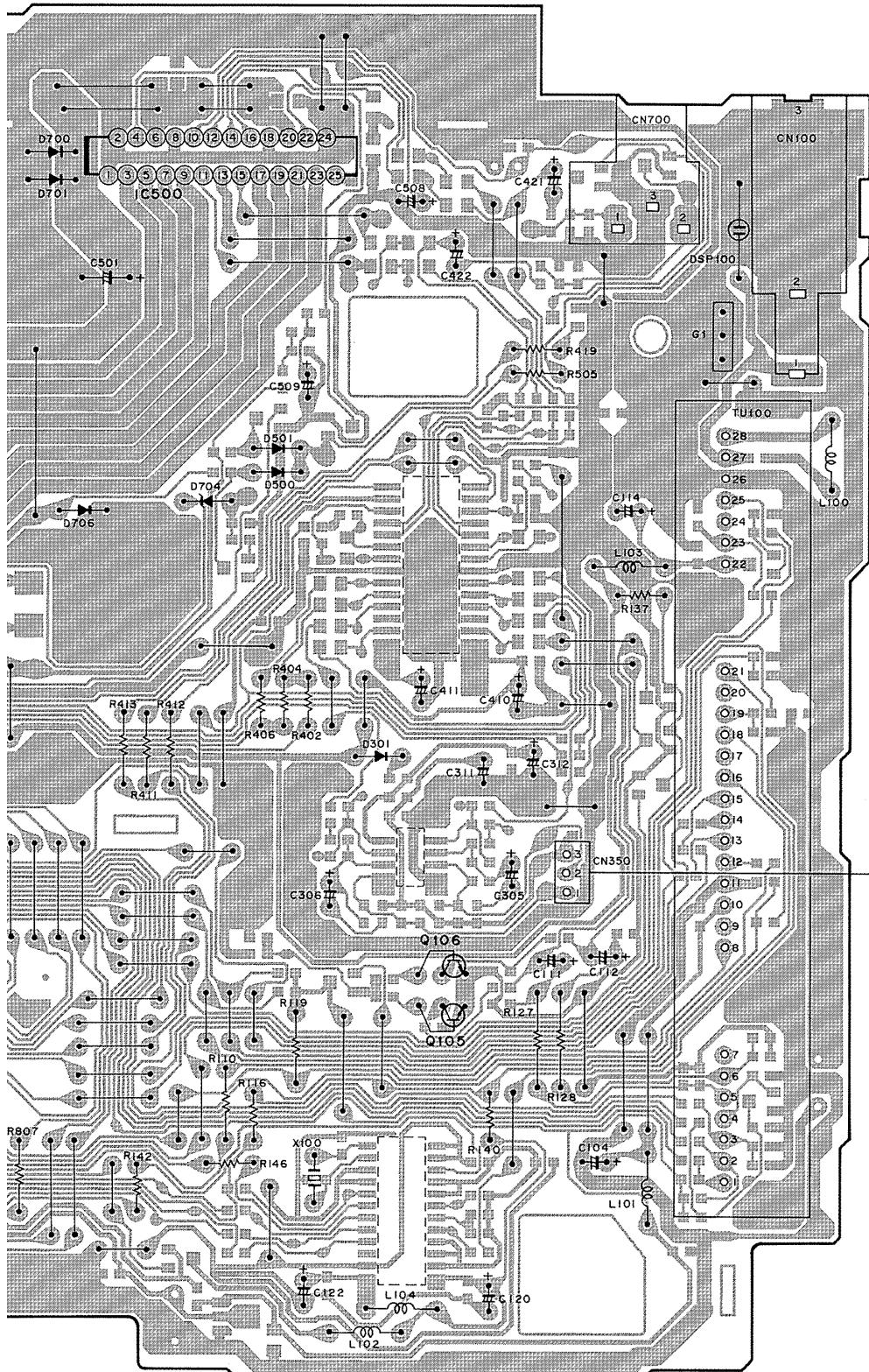
A NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.

For further information for respective destinations, be sure to check with the schematic diagram.



SIDE A

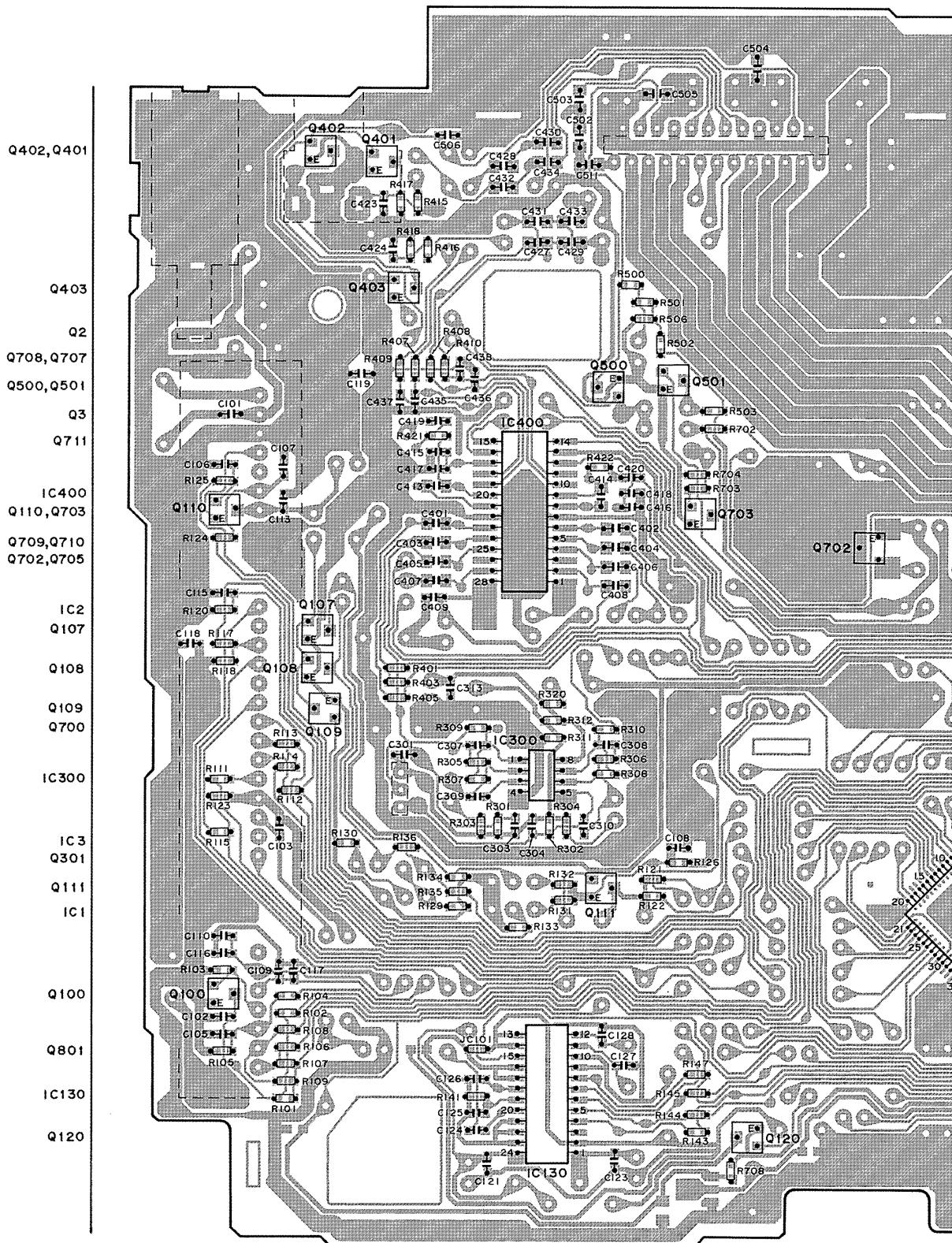


FRONT

KEH-P1010R,P1013R

A TUNER AMP UNIT

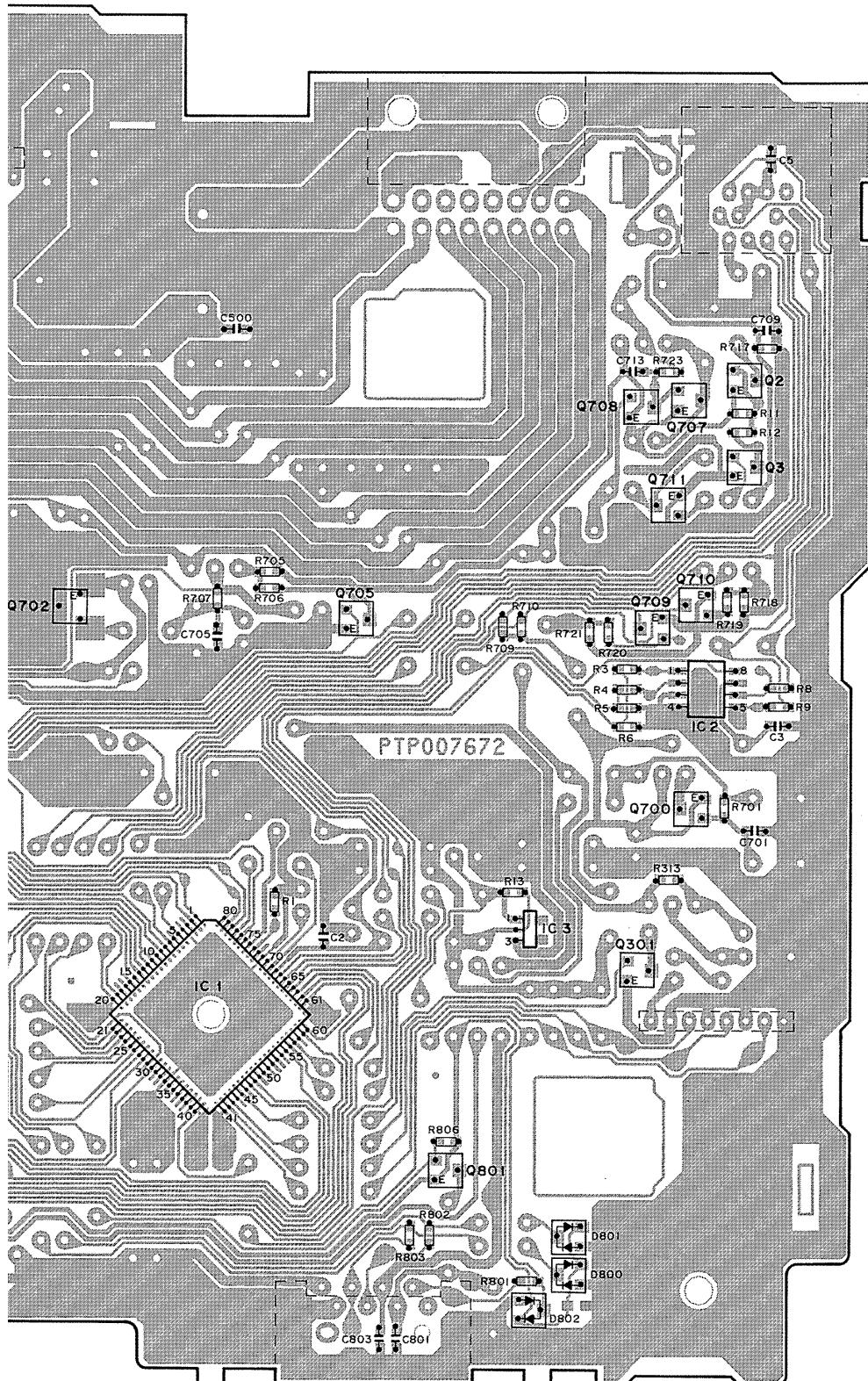
A



FRONT

SIDE B

A



B

C

D

5

6

7

8

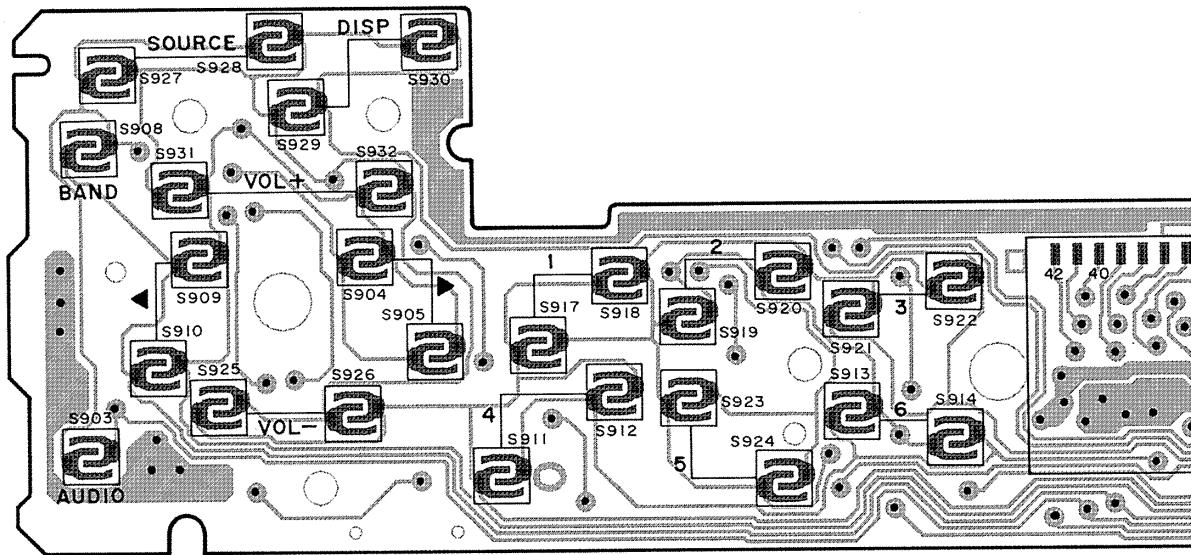
A

17

4.2 KEYBOARD UNIT

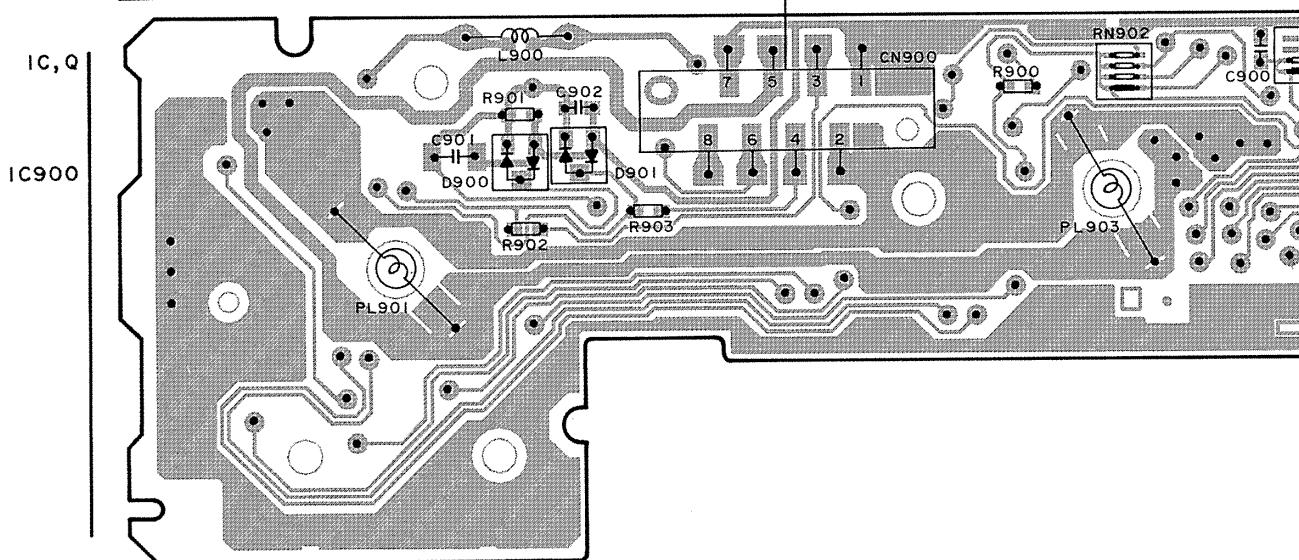
A

B KEYBOARD UNIT



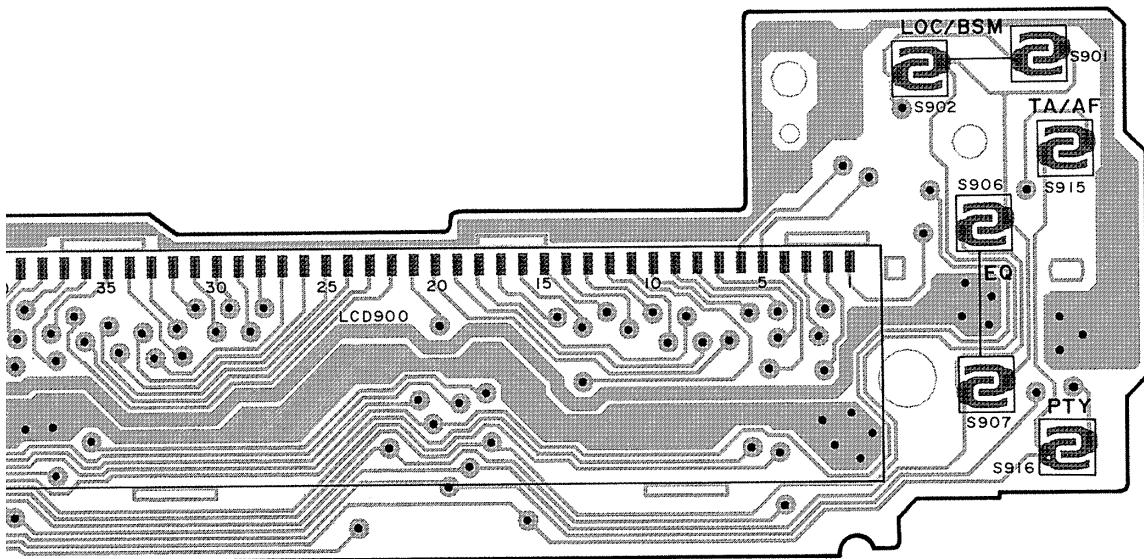
B

B KEYBOARD UNIT

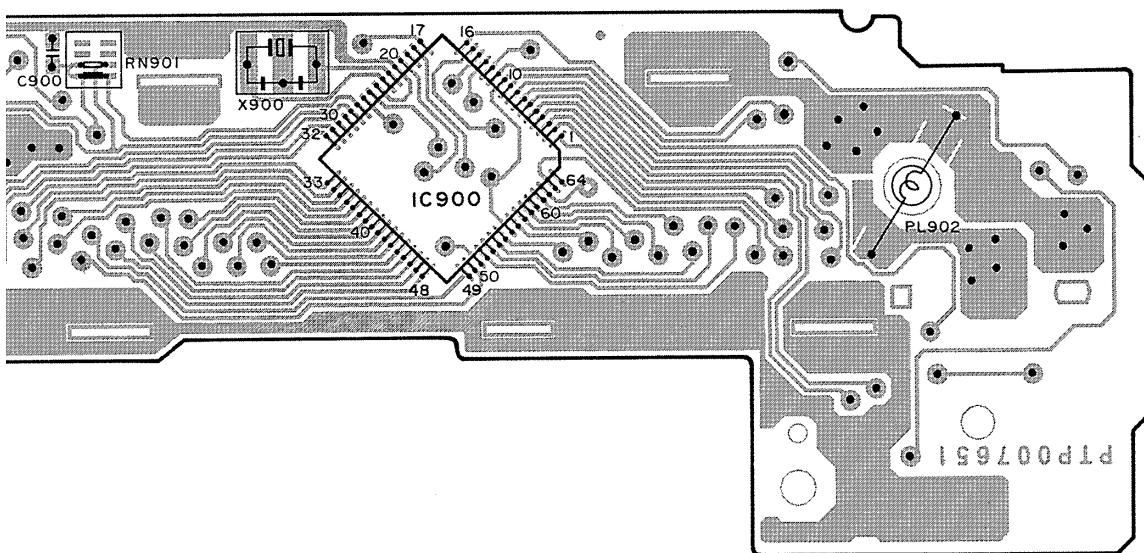


C

D

SIDE A

A

SIDE B

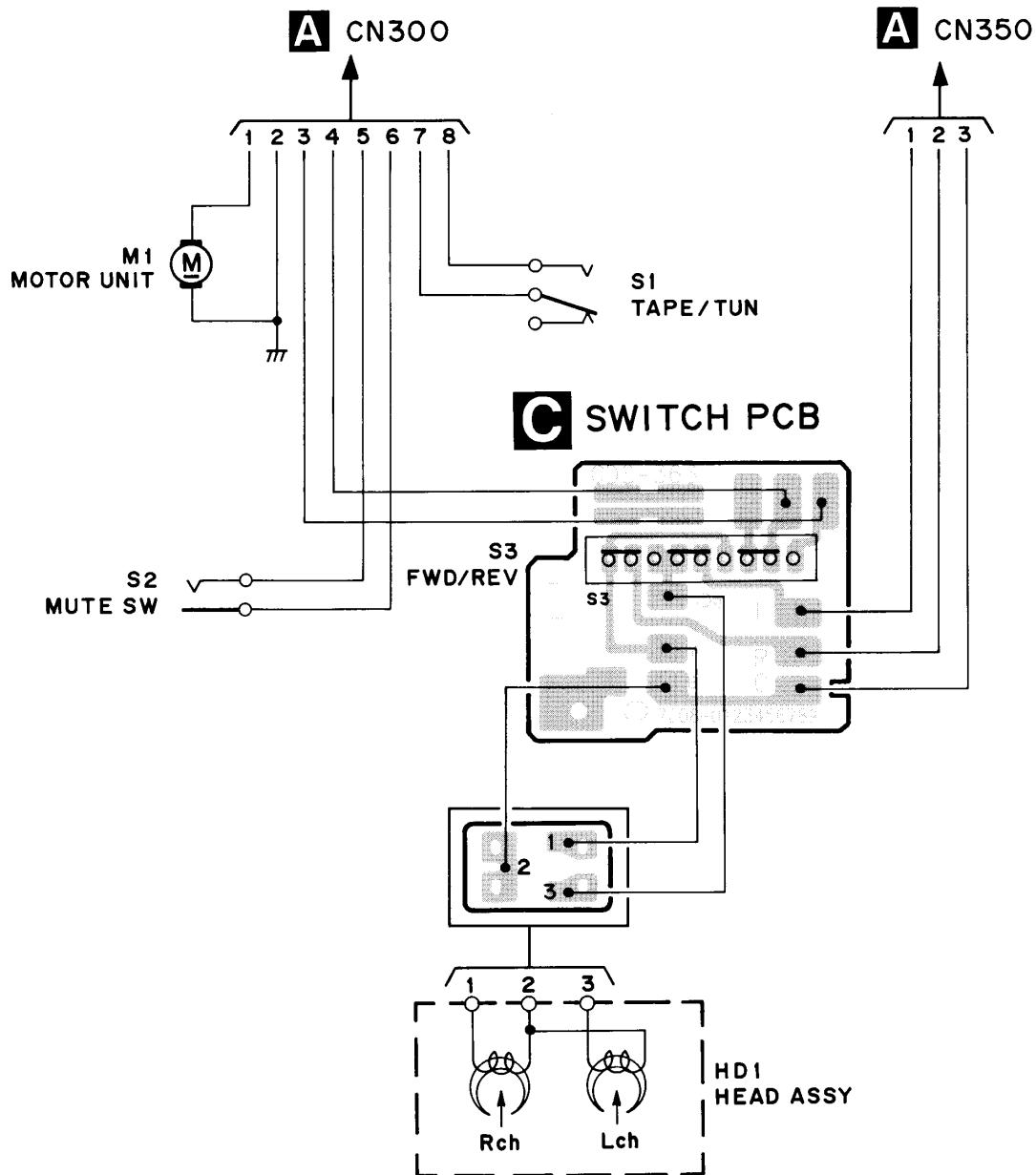
C

B

19

4.3 CASSETTE MECHANISM

A



B

C

D

5. ELECTRICAL PARTS LIST

NOTES:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○S○○○J, RS1/○○S○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

=====Circuit Symbol and No.====Part Name			Part No.	=====Circuit Symbol and No.====Part Name	Part No.
A	Unit Number	:CZW5519		Q 710	Transistor
	Unit Name	:Tuner Amp Unit		Q 711	Transistor
				Q 801	Transistor
				D 1	Diode
				D 300	Diode
MISCELLANEOUS					
IC 1	IC	000874010			
IC 2	IC	CA0008AM	D 301	Diode	1SS133
IC 3	IC	S-80834ANMP	D 500	Diode	1SS133
IC 130	IC	PM4009A	D 501	Diode	1SS133
IC 300	IC	BA4560F	D 502	Diode	11ES2
			D 503	Diode	11ES2
IC 400	IC	PML003AM			
IC 500	IC	TA8277H	D 504	Diode	11ES2
Q 2	Transistor	2PB709A	D 505	Diode	11ES2
Q 3	Transistor	DTC114EK	D 506	Diode	11ES2
Q 100	Transistor	2PD601A	D 507	Diode	11ES2
			D 508	Diode	11ES2
Q 105	Transistor	2SD1865			
Q 106	Transistor	2SD1865	D 509	Diode	11ES2
Q 107	Transistor	DTC143TK	D 700	Diode	11ES2
Q 108	Transistor	DTC143TK	D 701	Diode	11ES2
Q 109	Transistor	DTC114EK	D 702	Diode	11ES2
			D 703	Diode	HZS6L(B2)
Q 110	Transistor	2PD601A			
Q 111	Transistor	2PD601A	D 704	Diode	HZS9L(A2)
Q 120	Transistor	DTA124EK	D 705	Diode	HZS9L(B3)
Q 300	Transistor	2SB1238	D 706	Diode	11ES2
Q 301	Transistor	DTC114EK	D 709	Diode	1SS133
			D 710	Diode	11ES2
Q 401	Transistor	DTC143TK			
Q 402	Transistor	DTC143TK	D 711	Diode	11ES2
Q 403	Transistor	DTA124EK	D 712	Diode	HZS7L(C2)
Q 500	Transistor	DTC124EK	D 713	Diode	HZS7L(A1)
Q 501	Transistor	2PD601A	D 800	Diode	DA204K
			D 801	Diode	DA204K
Q 700	Transistor	2PD601A			
Q 701	Transistor	2SB1238	D 802	Diode	DA204K
Q 702	Transistor	2SD1760F5	D 803	Diode	MTZJ6R8(B)
Q 703	Transistor	2PD601A	L 1	Ferri-Inductor	LAU2R2K
Q 704	Transistor	2SA1428	L 3	Ferri-Inductor	LAU2R2K
			L 100	Ferri-Inductor	LAU4R7K
Q 705	Transistor	DTC114EK			
Q 706	Transistor	2SA1703	L 101	Ferri-Inductor	LAU1R0M
Q 707	Transistor	2PB709A	L 102	Inductor	LAU100K
Q 708	Transistor	DTA124EK	L 103	Ferri-Inductor	LAU1R0M
Q 709	Transistor	2PD601A	L 104	Ferri-Inductor	LAU101K
			L 700	Choke Coil 250uH	CTH1221

KEH-P1010R,P1013R

=====Circuit Symbol and No.====Part Name			=====Circuit Symbol and No.====Part Name		
---	---	Part No.	---	---	Part No.
L 801	Inductor	LAU100K	R 126		RS1/16S224J
G 1	Terminal	CKF1059	R 127		RD1/4PU162J
X 1	Ceramic Resonator 6.29MHz	CSS1310	R 128		RD1/4PU162J
X 100	Crystal Resonator 3.648MHz	CSS1447	R 129		RS1/16S272J
JC 101		RS1/16S0R0J	R 130		RS1/16S272J
TU 100	FM/AM Tuner Unit	CHX1442	R 131		RS1/16S224J
DSP100	Surge Protector	DSP-200-A11F	R 132		RS1/16S224J
RESISTORS			R 133		RS1/16S223J
R 1		RS1/16S473J	R 134		RS1/16S223J
R 3		RS1/16S102J	R 135		RS1/16S222J
R 4		RS1/16S102J	R 136		RD1/4PU103J
R 5		RS1/16S473J	R 137		RD1/4PU473J
R 6		RS1/16S473J	R 140		RS1/16S225J
			R 141		RD1/4PU102J
R 7		RD1/4PU102J	R 142		
R 8		RS1/16S101J	R 143		RS1/16S102J
R 9		RS1/16S101J	R 144		RS1/16S102J
R 10		RD1/4PU620J	R 145		RS1/16S102J
R 11		RS1/16S223J	R 146		RD1/4PU681J
			R 147		RS1/16S0R0J
R 12		RS1/16S472J			
R 13		RS1/16S822J	R 301		RS1/16S473J
R 14		RD1/4PU102J	R 302		RS1/16S473J
R 15		RD1/4PU222J	R 303		RS1/16S330J
R 18		RD1/4PU473J	R 304		RS1/16S330J
			R 305		RS1/16S153J
R 101		RS1/16S474J			
R 102		RS1/16S681J	R 306		RS1/16S153J
R 103		RS1/16S153J	R 307		RS1/16S564J
R 104		RS1/16S681J	R 308		RS1/16S564J
R 105		RS1/16S473J	R 309		RS1/16S102J
			R 310		RS1/16S102J
R 106		RS1/16S681J			
R 107		RS1/16S473J	R 311		RS1/16S103J
R 108		RS1/16S681J	R 312		RS1/16S103J
R 109		RS1/16S473J	R 313		RS1/16S103J
R 110		RD1/4PU102J	R 314		RD1/2PM102J
			R 315		RD1/4PU104J
R 111		RS1/16S681J			
R 112		RS1/16S103J	R 316		RD1/4PU104J
R 113		RS1/16S681J	R 317		RD1/4PU104J
R 114		RS1/16S681J	R 318		RD1/4PU1R5J
R 115		RS1/16S681J	R 319		RD1/4PU1R5J
			R 320		RS1/16S101J
R 116		RD1/4PU681J			
R 117		RS1/16S681J	R 401		RS1/16S821J
R 118		RS1/16S473J	R 402		RD1/4PU821J
R 119		RD1/4PU473J	R 403		RS1/16S223J
R 120		RS1/16S393J	R 404		RD1/4PU223J
			R 405		RS1/16S102J
R 121		RS1/16S472J			
R 122		RS1/16S473J	R 406		RD1/4PU102J
R 123		RS1/16S473J	R 407		RS1/16S0R0J
R 124		RS1/16S222J	R 408		RS1/16S0R0J
R 125		RS1/16S222J	R 409		RS1/16S0R0J
			R 410		RS1/16S0R0J

=====Circuit Symbol and No.====Part Name		Part No.	=====Circuit Symbol and No.====Part Name		Part No.
R 411		RD1/4PU222J	C 101		CKSRYB103K50
R 413		RD1/4PU222J	C 102		CKSRYB472K50
R 415		RS1/16S821J	C 103		CKSRYB473K25
R 416		RS1/16S821J	C 104		CEAL101M10
R 417		RS1/16S473J	C 105		CKSRYB182K50
R 418		RS1/16S473J	C 106		CKSRYB223K25
R 419		RD1/4PU562J	C 107		CKSRYB223K25
R 421		RS1/16S472J	C 108		CKSRYB223K25
R 422		RS1/16S472J	C 109		CKSRYB103K50
R 500		RS1/16S101J	C 110		CKSRYB103K50
R 501		RS1/16S221J	C 111		CEAL2R2M50
R 502		RS1/16S103J	C 112		CEAL2R2M50
R 503		RS1/16S152J	C 113		CKSRYB103K50
R 504		RD1/4PU223J	C 114		CEAL101M10
R 505		RD1/4PU103J	C 115		CKSRYB472K50
R 506		RS1/16S153J	C 116		CKSRYB222K50
R 701		RS1/16S223J	C 117		CKSRYB222K50
R 702		RS1/16S472J	C 118		CKSRYB473K25
R 703		RS1/16S103J	C 119		CCSRCH101J50
R 704		RS1/16S223J	C 120		CEAL220M10
R 705		RS1/16S223J	C 121		CKSRYB104K25
R 706		RS1/16S102J	C 122		CEAL220M10
R 707		RS1/16S122J	C 123		CKSRYB104K25
R 708		RS1/16S0R0J	C 124		CCSRCH471J50
R 709		RS1/16S104J	C 125		CCSRCH471J50
R 710		RS1/16S473J	C 126		CKSRYB104K25
R 716		RD1/4PU102J	C 127		CCSRCH270J50
R 717		RS1/16S472J	C 128		CCSRCH270J50
R 718		RS1/16S473J	C 301		CCSRCH471J50
R 719		RS1/16S223J	C 303		CKSRYB102K50
R 720		RS1/16S473J	C 304		CKSRYB102K50
R 721		RS1/16S473J	C 305		CEAL101M10
R 722		RD1/2PM102J	C 306		CEAL101M10
R 723		RS1/16S223J	C 307		CKSRYB103K50
R 724		RD1/2PM102J	C 308		CKSRYB103K50
R 801		RS1/16S222J	C 309		CCSRCH101J50
R 802		RS1/16S222J	C 310		CCSRCH101J50
R 803		RS1/16S222J	C 311		CEAL330M10
R 804		RD1/4PU473J	C 312		CEAL100M16
R 805		RD1/4PU222J	C 313		CKSRYB103K50
R 806		RS1/16S223J	C 401		CKSRYB105K10
R 807		RD1/4PU222J	C 402		CKSRYB105K10
CAPACITORS			C 403		CKSRYB105K10
C 1		CEAL4R7M16	C 404		CKSRYB105K10
C 2		CCSRCH101J50	C 405		CKSRYB224K10
C 3		CKSRYB102K50	C 406		CKSRYB224K10
C 4		CEAL2R2M50	C 407		CKSRYB224K10
C 5		CKSRYB104K25	C 408		CKSRYB104K25
			C 409		CEAL470M10
			C 410		

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
C 411	CEAL100M16	B Unit Number :CZW5522(KEH-P1010R/XM/EW)	
C 413	CKSRYB105K10	Unit Name :CZW5521(KEH-P1013R/XM/EW)	
C 414	CKSRYB105K10	Unit Name :Keyboard Unit	
C 415	CKSRYB103K50		
C 416	CKSRYB103K50	MISCELLANEOUS	
C 417	CKSRYB472K50	IC 900 IC	PD6293A
C 418	CKSRYB472K50	D 900 Diode	DA204K
C 419	CKSRYB103K50	D 901 Diode	DA204K
C 420	CKSRYB103K50	L 900 Ferri-Inductor	LAU101K
C 421	CEAL2R2M50	X 900 Ceramic Resonator 4.97MHz	CSS1422
C 422	CEAL2R2M50	PL 901 Lamp 14V 65mA	See Contrast table
C 423	CKSRYB222K50	PL 902 Lamp 14V 65mA	See Contrast table
C 424	CKSRYB222K50	PL 903 Lamp 14V 65mA	See Contrast table
C 427	CKSRYB474K10	RN 901	RAB4C473J
C 428	CKSRYB474K10	RN 902	RAB4C473J
C 429	CKSRYB474K10	LCD900 LCD	CZA5541
C 430	CKSRYB474K10		
C 431	CKSRYB474K10		
C 432	CKSRYB474K10		
C 433	CKSRYB474K10	R 900	RS1/16S473J
		R 901	RS1/16S472J
C 434	CKSRYB474K10	R 902	RS1/16S222J
C 500	CKSRYB104K25	R 903	RS1/16S222J
C 501	3300μF/16V	CCH1018	
C 502		CKSRYB474K10	CAPACITORS
C 503		CKSRYB474K10	
C 504		C 900	CKSRYB102K50
C 505	CKSRYB105K10	C 901	CKSQYB225K10
C 506	CKSRYB105K10	C 902	CKSRYB104K25
C 508	CKSRYB473K25		
C 509	CEAL100M16		
	CEAL330M10		
C 511	CKSRYB224K10	C Unit Number :	
C 700	CEA471M16	Unit Name :Switch PCB	
C 701	CKSRYB103K50		
C 703	CEAL470M10	S 3 Slide Switch(FWD/REV)	1-0363-7002
C 704	CEAL101M10		
		Miscellaneous Parts List	
C 705	CKSRYB103K50	S 1 Switch(TAPE/TUN)	1-0363-7005
C 706	CEAL101M10	S 2 Switch(Mute)	1-0363-7001
C 709	CKSRYB102K50	M 1 Motor Assy	X-0363-7006
C 712	CEAL3R3M50	HD 1 Head	1-0036-7123
C 713	CKSRYB473K25		
C 714	CEALR10M50		
C 801	CCSRCH101J50		
C 803	CCSRCH101J50		

CONTRAST TABLE of KEYBOARD UNIT

KEH-P1010R/XM/EW and KEH-P1013R/XM/EW have the same construction except for the following:

Symbol and Description	Part No.	
	KEH-P1010R/XM/EW	KEH-P1013R/XM/EW
PL 901	CZE2950	CZE2951
PL 902	CZE2950	CZE2951
PL 903	CZE2950	CZE2951

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 DISASSEMBLY

● Removing the Upper Case(not shown)

1.Remove the Upper Case.

● Removing the Cassette Mechanism Module(Fig.1)

- ① Remove the four screws and then remove the Cassette Mechanism.

● Remove the Grille Assy(Fig.1)

- ② Remove the two screws.

Disconnect the two stoppers and then remove the Grille Assy.

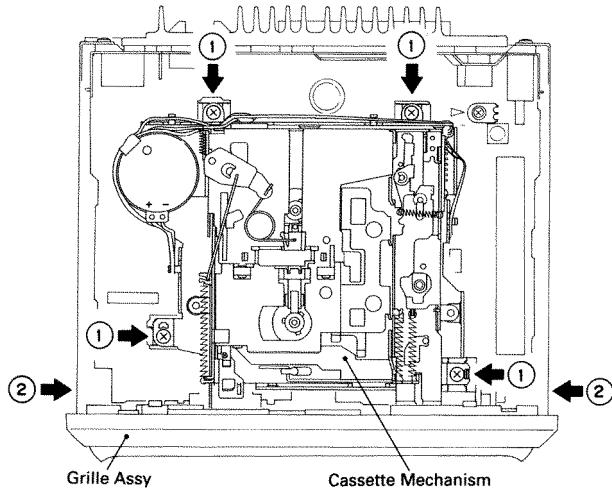


Fig. 1

● Removing the Tuner Amp Unit(Fig.2)

- ① Remove the three screws.
- ② Remove the screw.
- ③ Unbend the five claws and then remove the Tuner Amp Unit.

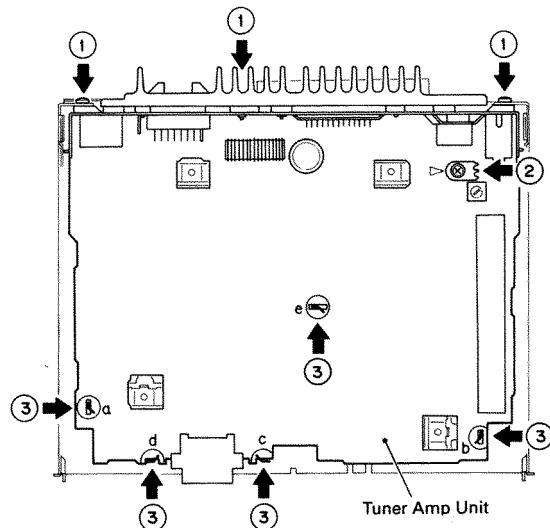
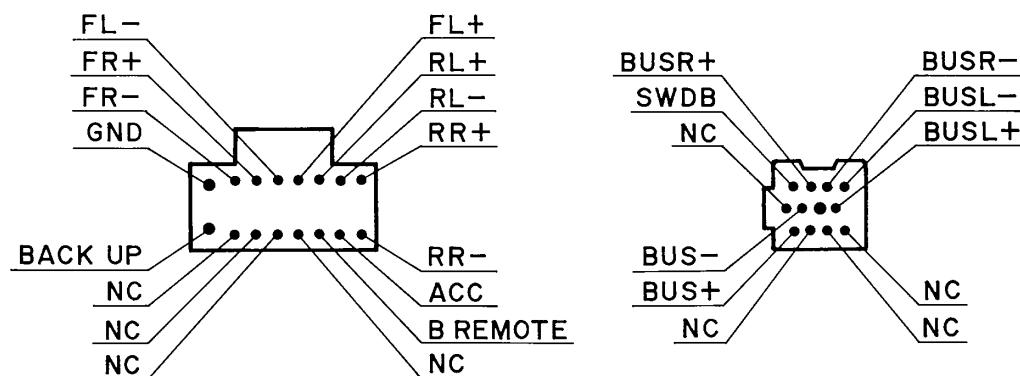
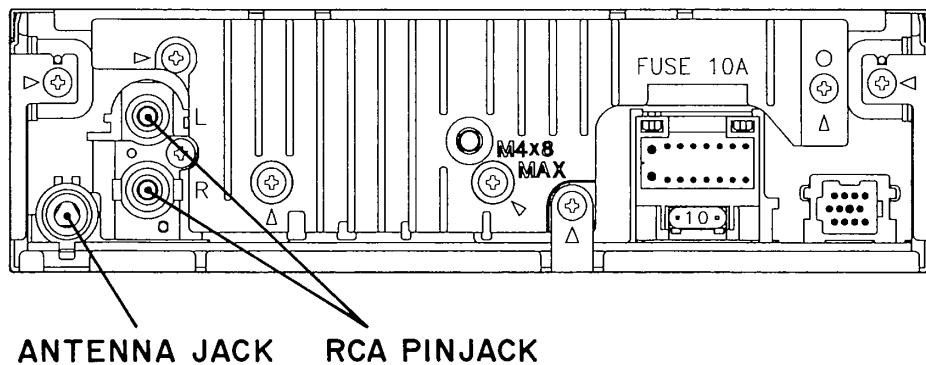


Fig. 2

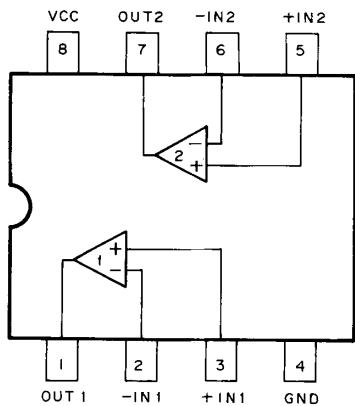
7.1.2 CONNECTOR FUNCTION DESCRIPTION



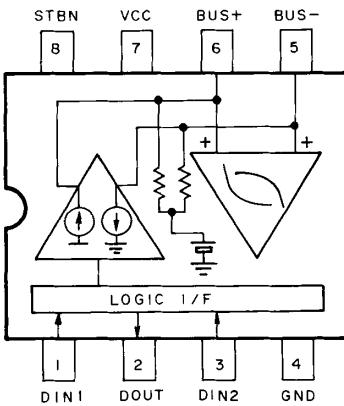
7.2 PARTS

7.2.1 IC

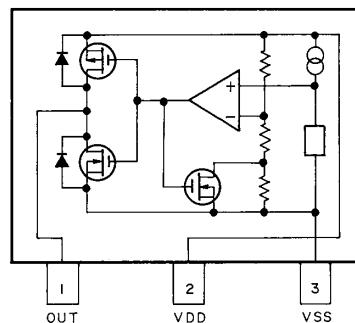
BA4560F



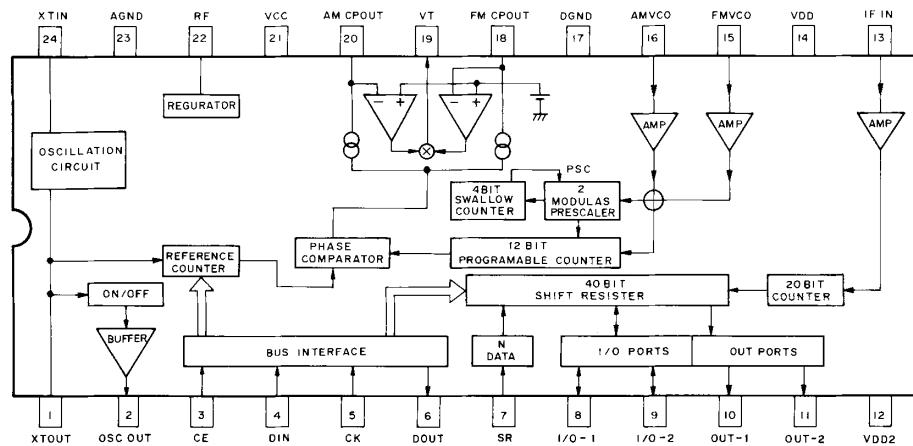
CA0008AM



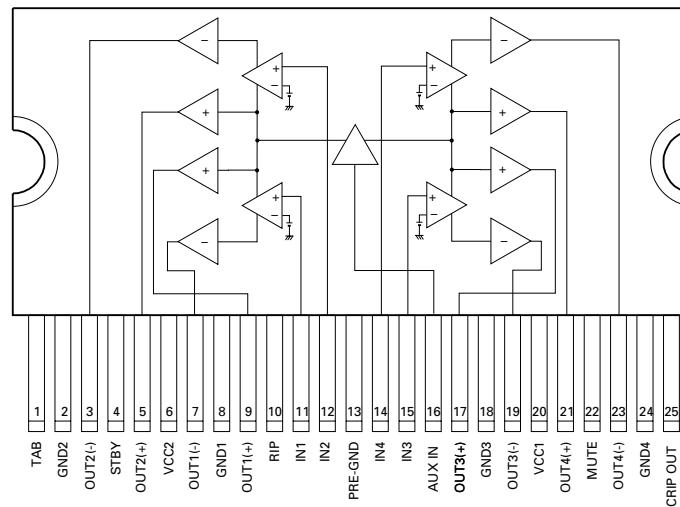
S-80834ANMP



TB2118F



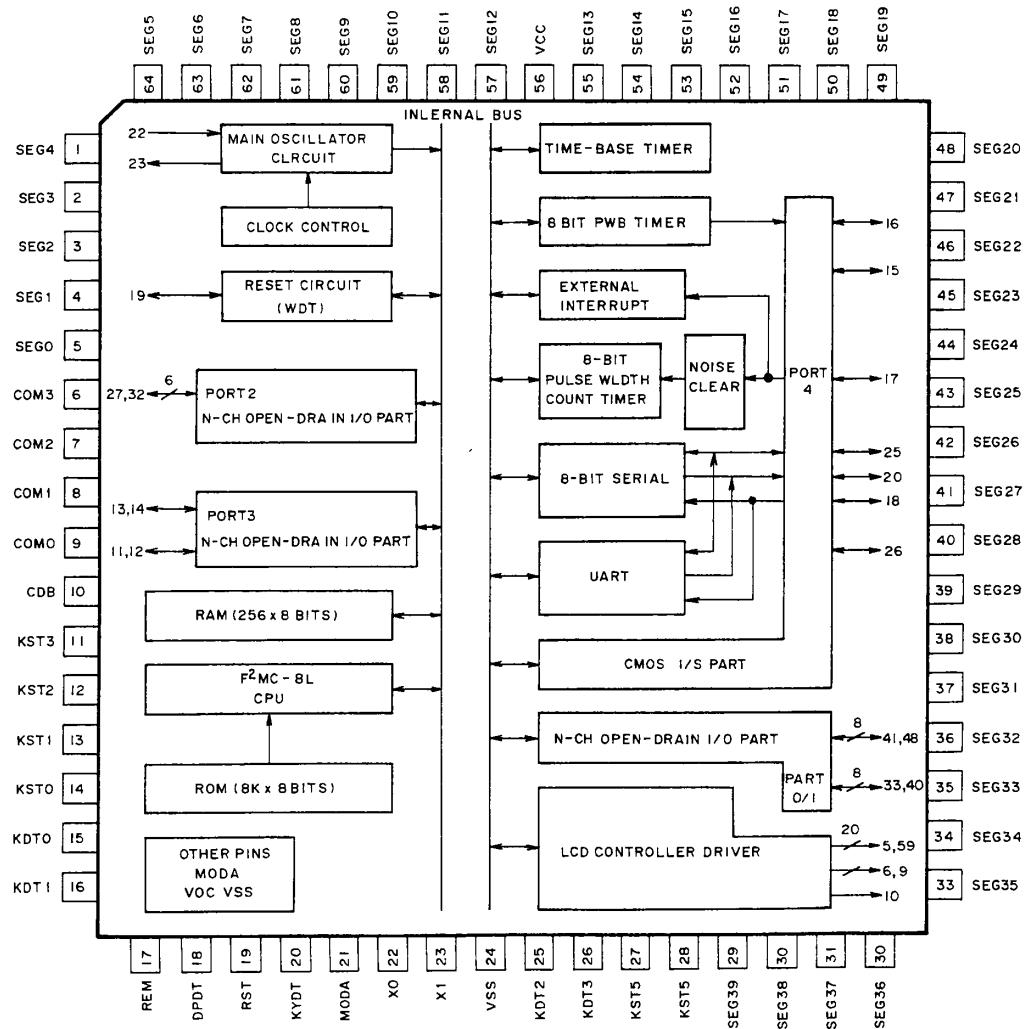
TA8277H



IC's marked by * are MOS type.

Be careful in handling them because they are very liable to be damaged by electrostatic induction

* PD6293A

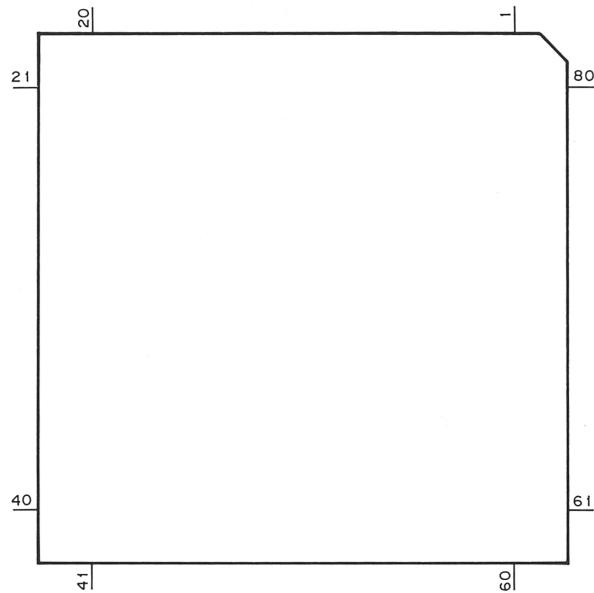


● Pin Functions(000874010)

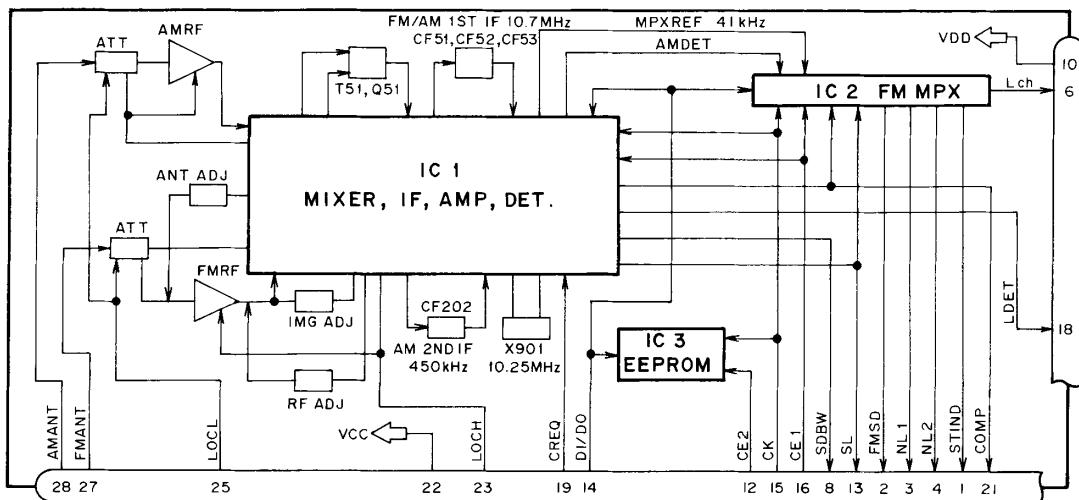
Pin No.	Pin Name	I/O	Format	Function and Operation
1	SD	I		SD signal input
2	ST	I		FM stereo input
3	ADPW	O		A/D converter power supply control output
4	AVSS			GND
5	MUTE	O	C	System mute output
6	NC			Not used
7	AVREF1	O	C	A/D converter reference voltage terminal
8	KYDT	I		Display data input
9	DPDT	O	C	Key data output
10	NC			Not used
11	TUNPDI	I		PLL IC data input
12	TUNPDO	O	C	PLL IC data output
13	TUNPCK	O	C	PLL IC clock output
14	TUNPCE	O	C	PLL IC chip enable output
15	TMUTE	O	C	Tuner mute output
16-18	NC			Not used
19	SWVDD	O	C	Grille chip enable output
20	ASENBO	O	C	Slave power supply control output
21	IPPW	O	C	Power supply control output for IP BUS interface IC
22	VST	O	C	Strobe pulse output for electronic volume
23	VCK	O	C	Clock output for electronic volume
24	VDT	O	C	data output for electronic volume
25	LOCK	O	C	Local L output
26	LOCH	O	C	Local H output
27	SYSPW	O	C	System power output
28	TUNPCE2	O	C	EEPROM chip enable output
29	BREM	O	C	System power ON/OFF output
30	CURRQ	O	C	Tuner voltage FIX output
31,32	NC			Not used
33	VSS			GND
34-39	NC			Not used
40	TAPE IN	I		TAPE pack-in detection input
41	FF/REW	I		FF/REW detection input
42	N/R	I		Cassette mechanism tape direction input
43	MOTOR	O	C	MOTOR power supply control output
44	NC		C	Not used
45	PEE	O	C	Beep tone output
46	NC			Not used
47	RDS57K	I		RDS 57kHz pulse count input
48	SDBW	I		SD input at NF
49-54	NC			Not used
55	FM / AM	O	C	FM/AM band select pin "H" : AM "L" : FM
56	TX	O	C	IP BUS data output
57	RX	I		IP BUS data input
58	NC			Not used
59	RDSLK	I		RDS LK input
60	RESET	I		Reset input
61	IDET	I		PLL lock detect input
62	RCK	I		RDS clock input
63	DSENS	I		Grille detach sense input
64	RDT	I		RDS data input
65	ASENS	I		ACC power sense input
66	BSENS	I		Back up power sense input
67	DRST	O	C	RDS reset output
68	VDD			Power supply
69	X2			Crystal oscillator connection pin
70	X1			Crystal oscillator connection pin
71	IC			(GND)
72	XT2			Not used
73	TESTIN	I		Test program mode input
74	AVDD			S/D converter power supply terminal
75	AVREFO	I		S/D converter reference voltage terminal
76	SL	I		Signal level input
77	NC	I		Not used
78	NL1	I		RDS noise level input 1
79	NL2DT	I		RDS noise level input 2
80	NC			Not used

Format	Meaning
C	C MOS

* 000874010

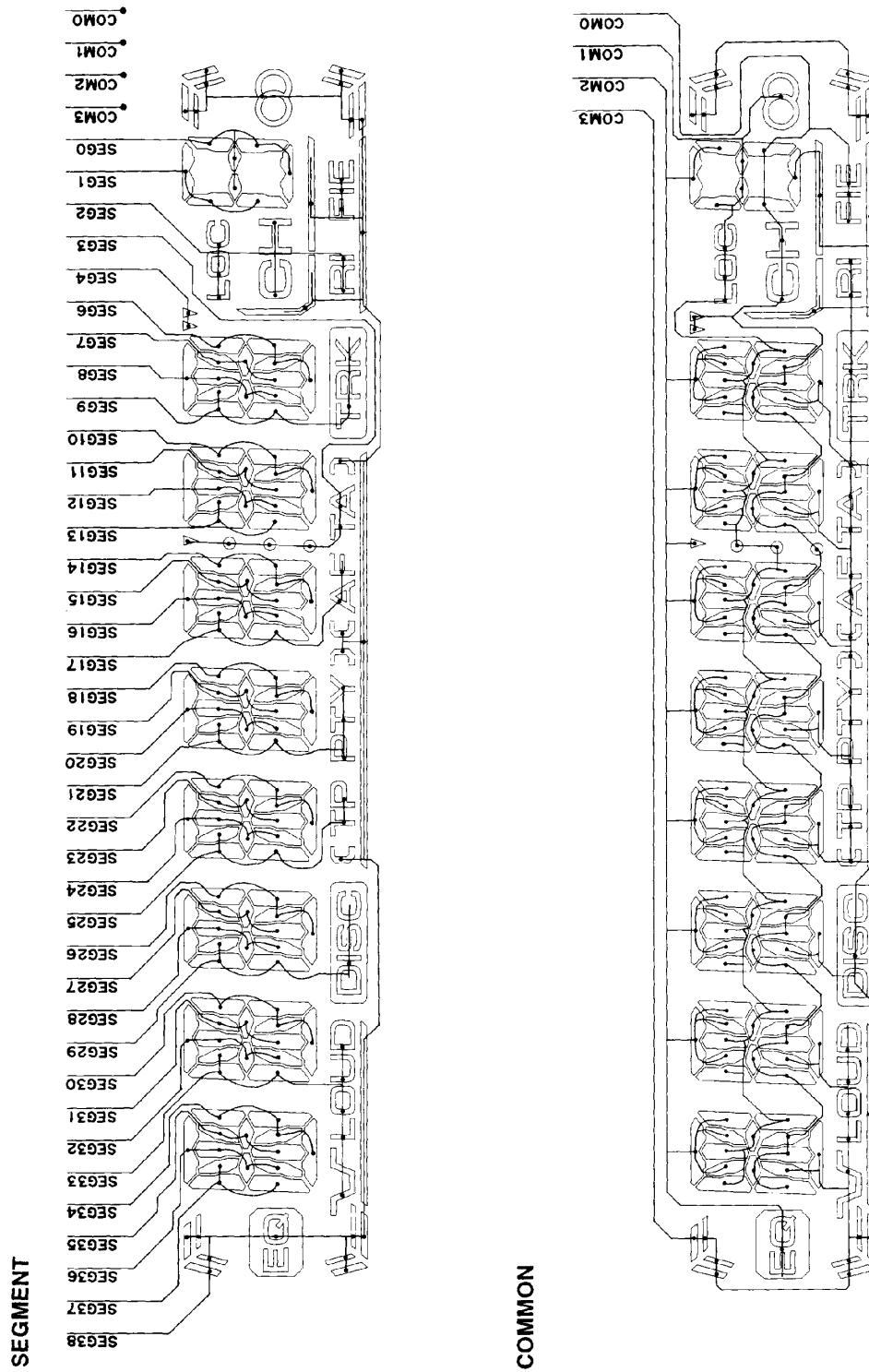


● FM/AM Tuner Unit

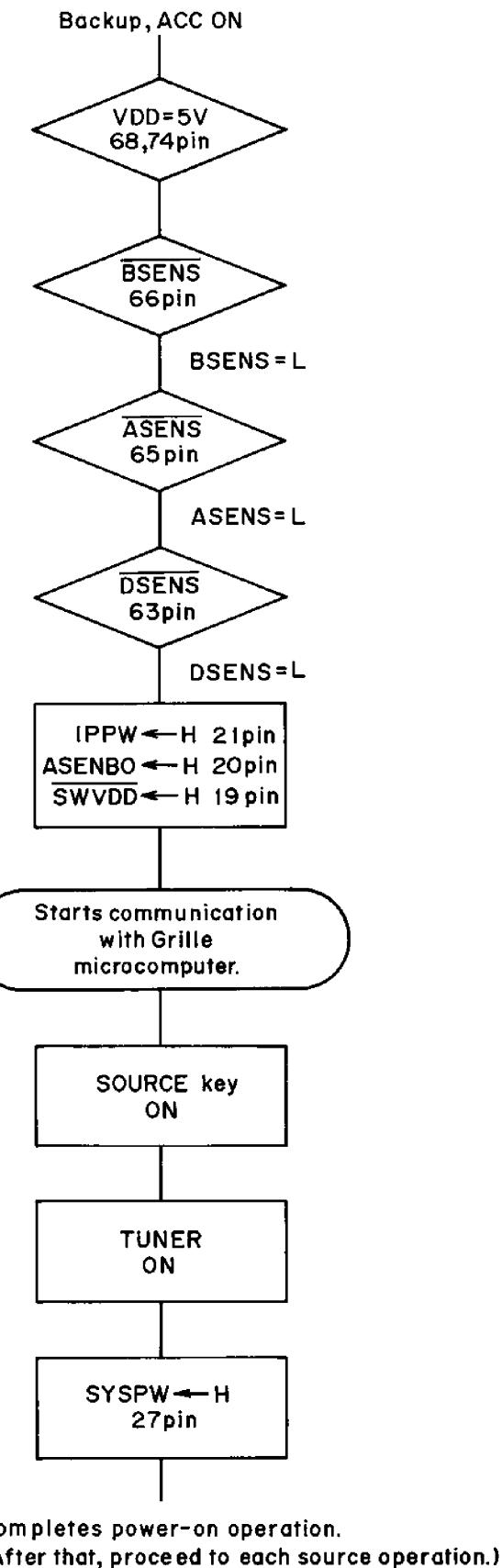


7.2.2 DISPLAY

- CZA5541



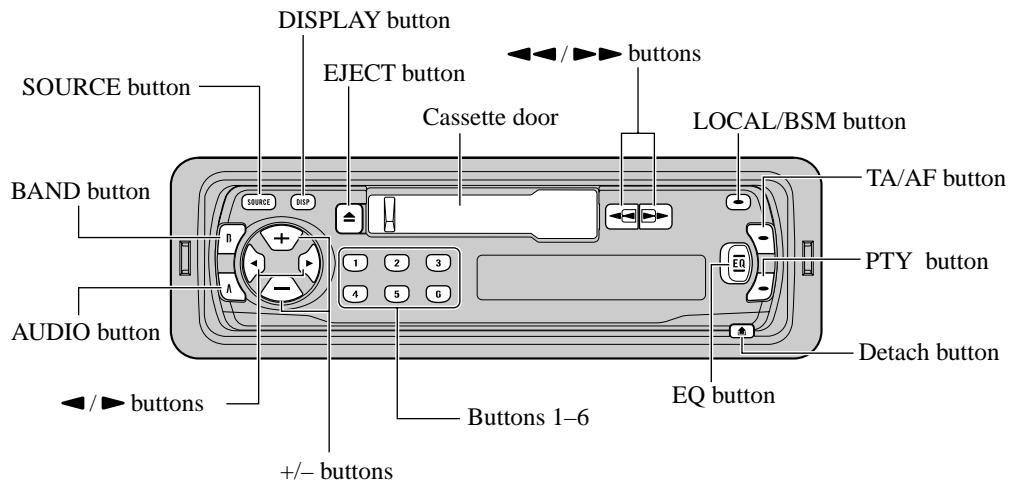
7.3 OPERATIONAL FLOW CHART



8. OPERATIONS AND SPECIFICATIONS

Key Finder

Head Unit



Basic Operation

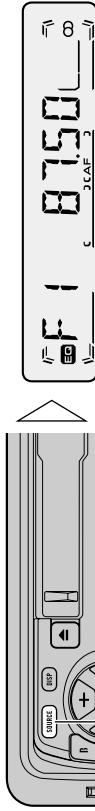
To Listen to Music

The following explains the initial operations required before you can listen to music.

Note:

- Loading a cassette in this product.

1. Select the desired source (e.g. Tuner).



Each press changes the Source ...

Each press of the SOURCE button selects the desired source in the following order:
Tuner → Cassette player → Multi-CD player → External Unit

Note:

- External Unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this product. Only one External Unit can be controlled by this product.
 - * When a product corresponding to each source is not connected to this product.
 - * When no tape is set in this product.
 - * When no magazine is set in the Multi-CD player.
 - * When this product's blue/white lead is connected to the car's Auto-antenna relay control terminal, the car's Auto-antenna extends when this product's source is switched ON. To retract the antenna, switch the source OFF.

2. Raise or lower the volume.



3. Turn the source OFF.



Basic Operation of Tuner

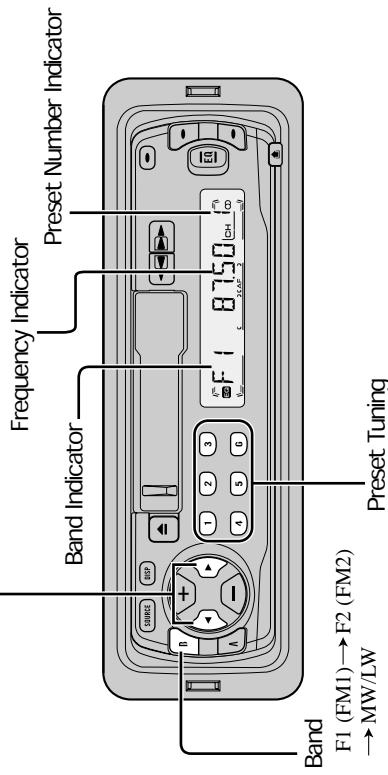
This product's AF function can be switched ON and OFF. AF should be switched OFF for normal tuning operations.

- #### 1. Manual and Seek Tuning
- You can select the tuning method by changing the length of time you press the ▶/◀ button.

Manual Tuning (step by step)	0.5 seconds or less
Seek Tuning	0.5 seconds or more

Note:

- If you continue pressing the button for longer than 0.5 seconds, you can skip broadcast stations. Seek Tuning starts as soon as you release the button.
- Stereo indicator "◎" lights when a stereo station is selected.



- You can memorize broadcast stations in buttons 1 through 6 for easy, one-touch station recall.

Preset station recall	2 seconds or less
Broadcast station preset memory	2 seconds or more

Note:

- Up to 12 FM stations (6 each in F1 (FM1) and F2 (FM2)) and 6 MW/LW stations can be stored in memory.

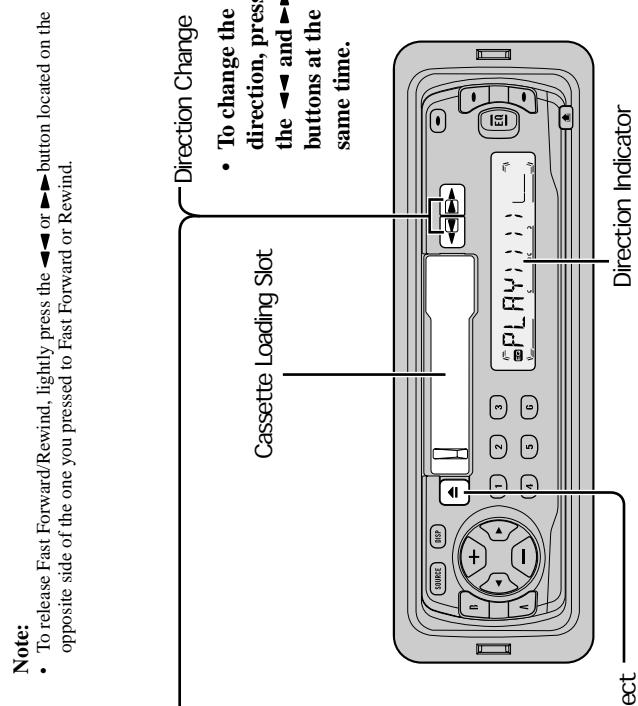
Basic Operation**Basic Operation of Cassette Player**

- Fast Forward/Rewind**
- To select Fast Forward, press the button for the same direction as the direction indicator.
 - To select Rewind, press the button for the opposite direction as the direction indicator.

Note:

Direction Change

- To change the direction, press the \blacktriangleleft and \triangleright buttons at the same time.



- Note:**
- The Tape function can be turned ON/OFF with the cassette tape remaining in this product.

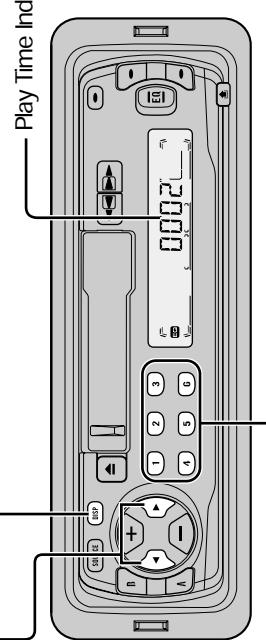
Basic Operation of Multi-CD Player**This product can control a Multi-CD player (sold separately).**

- Track Search and Fast Forward/Reverse**
- You can select between Track Search or Fast Forward/Reverse by pressing the $\blacktriangleleft/\triangleright$ button for a different length of time.

Track Search	0.5 seconds or less
Fast Forward/Reverse	Continue pressing

Switching the Display

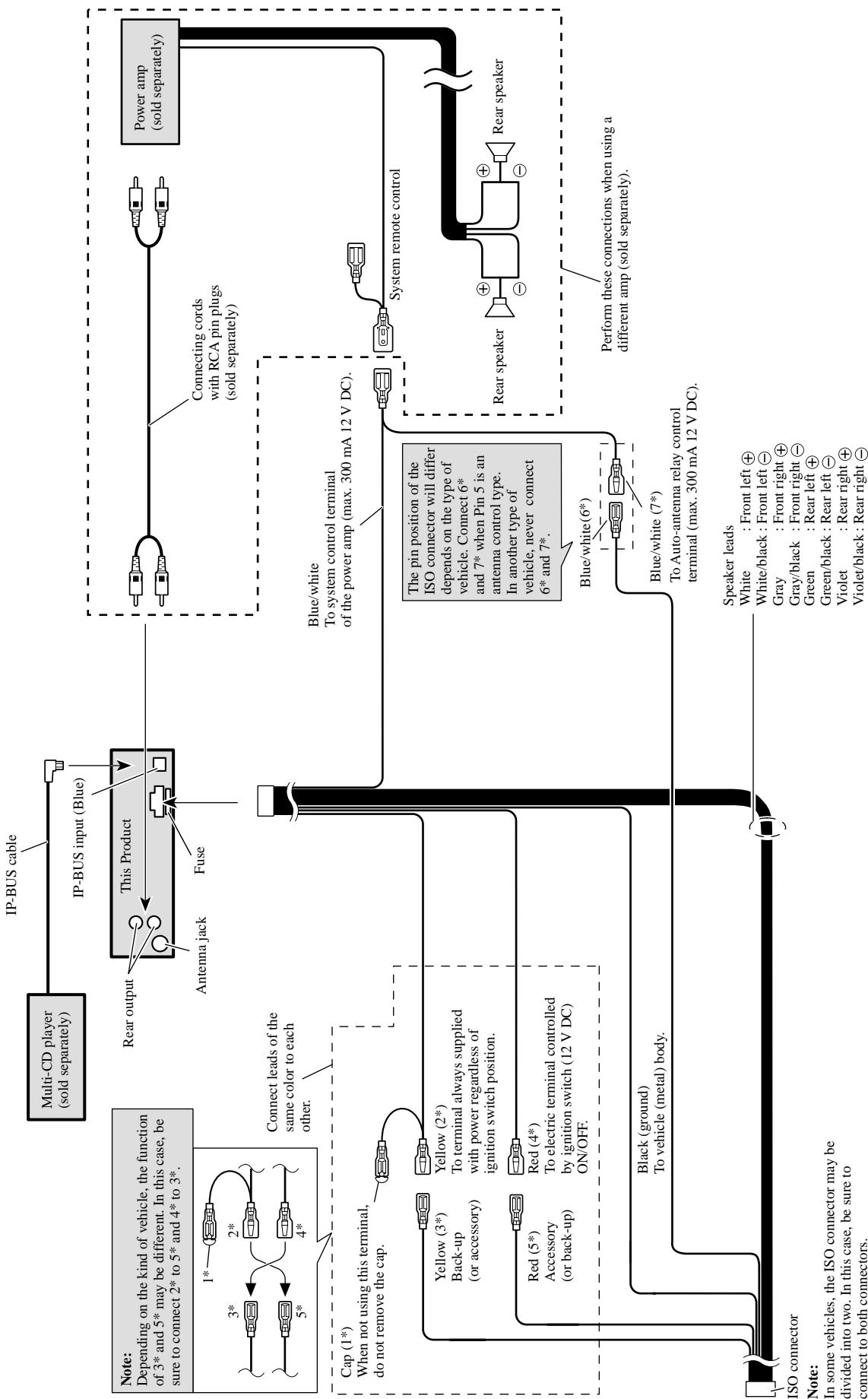
Each press of the DISPLAY button changes the display in the following order:
Playback mode (Play Time) → Disc and Track Number



- Note:**
- You can select discs directly with the 1 to 6 buttons. Just press the number corresponding to the disc you want to listen to.

- Note:**
- When a 12-Disc Multi-CD Player is connected and you want to select disc 7 to 12, press the 1 to 6 buttons for 2 seconds.

- Note:**
- The Multi-CD Player may perform a preparatory operation, such as verifying the presence of a disc or reading disc information, when the power is turned ON or a new disc is selected for playback. "READY" is displayed.
 - If the Multi-CD Player cannot operate properly, an error message such as "ERROR-14" is displayed. Refer to the Multi-CD Player owner's manual.
 - If there are no discs in the Multi-CD Player magazine, "NO DISC" is displayed.
 - You can not operate the 50-Disc Type Multi-CD Player with this product.



Specifications

General

Power source	14.4 V DC (10.8 – 15.1 V allowable)
Grounding system	Negative type
Max. current consumption	8.5 A
Dimensions	
(mounting size)	178 (W) × 50 (H) × 155 (D) mm
(front face)	188 (W) × 58 (H) × 19 (D) mm
Weight	1.2 kg
Buckup current	4.3 mA

Amplifier

Maximum power output	45 W × 4
Continuous power output	25 W × 4
	(DIN45324, +B = 14.4 V)
Load impedance	4 Ω (4 – 8 Ω allowable)
Preout maximum output level/output impedance	2.2 V / 1 kΩ
Equalizer (3 band equalizer)	
(Low)	±12 dB
(Mid)	±12 dB
(High)	±12 dB
Loudness contour	
(Low)	+3.5 dB (100 Hz), +3 dB (10 kHz)
(Mid)	+10 dB (100 Hz), +6.5 dB (10 kHz)
(High)	+11 dB (100 Hz), +11 dB (10 kHz) (volume: -30 dB)

Cassette player

Tape	Compact cassette tape (C-30 – C-90)
Tape speed	4.76 cm/sec. (+0.14cm/sec., -0.05cm/sec.)
Fast forward/rewinding time	Approx. 100 sec. for C-60
Wow & flutter	0.13% (WRMS)
Frequency response	30 – 16,000 Hz (±3 dB)
Stereo separation	45 dB
Signal-to-noise ratio	41 dB (IEC-A network)

FM tuner

Frequency range	87.5 – 108 MHz
Usable sensitivity	9 dBf (0.77 μV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity	15 dBf (1.5 μV/75 Ω, mono)
Signal-to-noise ratio	70 dB (IEC-A network)
Distortion	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response	30 – 15,000 Hz (±3 dB)
Stereo separation	40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range	531 – 1,602 kHz (9 kHz)
Usable sensitivity	18 μV (S/N: 20 dB)
Selectivity	50 dB (±9 kHz)

LW tuner

Frequency range	153 – 281 kHz
Usable sensitivity	30 μV (S/N: 20 dB)
Selectivity	50 dB (±9 kHz)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.